

# THE MILLING WORLD

AND

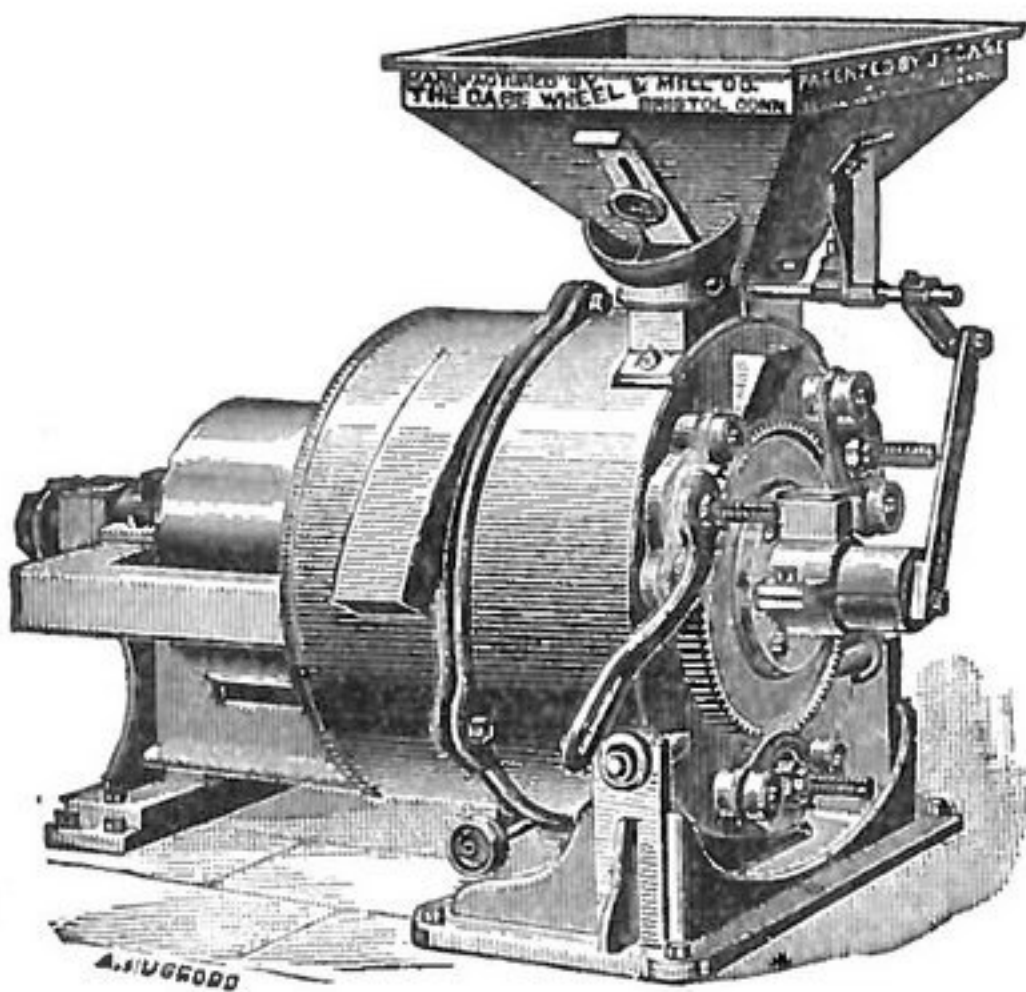
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXII. No. 8.

BUFFALO, N. Y., APRIL 21, 1890.

\$1.50 PER YEAR.



## VICTORY OVER ALL OTHERS. SINGLE & DOUBLE VERTICAL GRINDING MILLS. (J. T. CASE'S PATENT.)

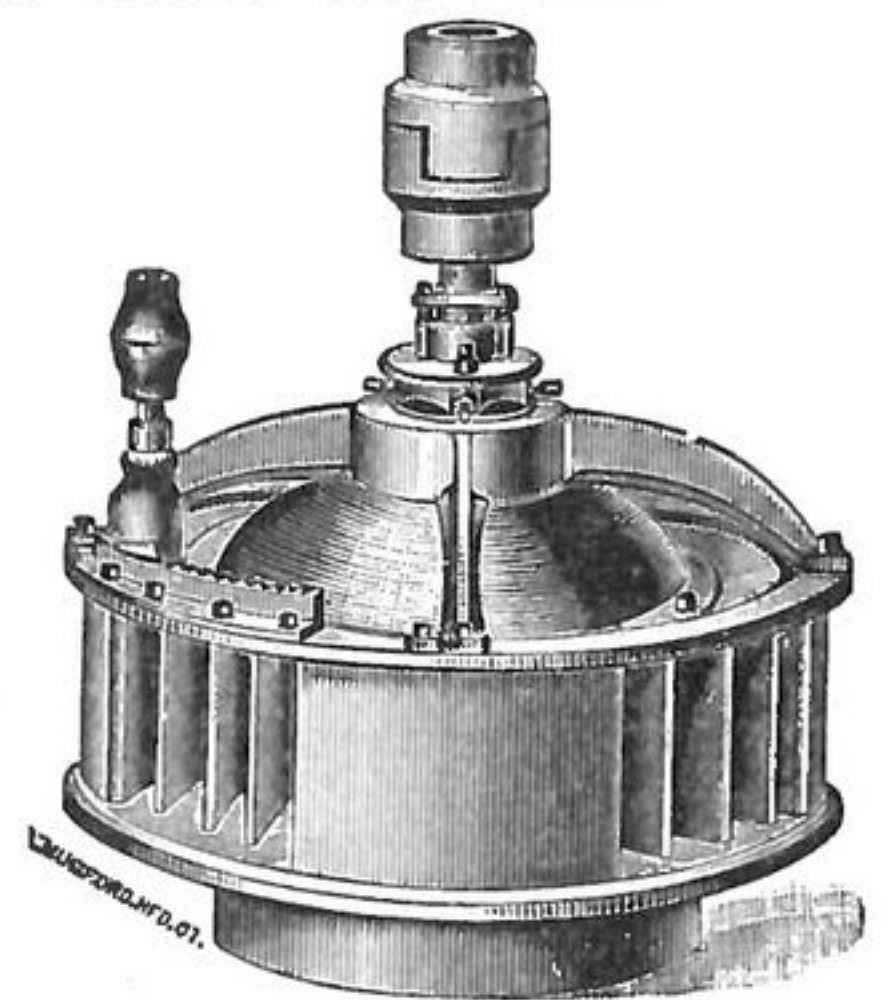
FACTS ARE MIGHTIER THAN ASSERTIONS. READ WHAT THEY SAY:

"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. RUSSELL & Co., Meriden, Conn.  
 "Superior to any mill in use."—GEO. WESTON, Bristol, Conn.  
 "The best satisfaction in quantity and quality."—CHILD'S ELEVATOR, Manchester, Ct.  
 "We take pleasure in recommending it."—GARLAND, LINCOLN & Co., Worcester, Mass.

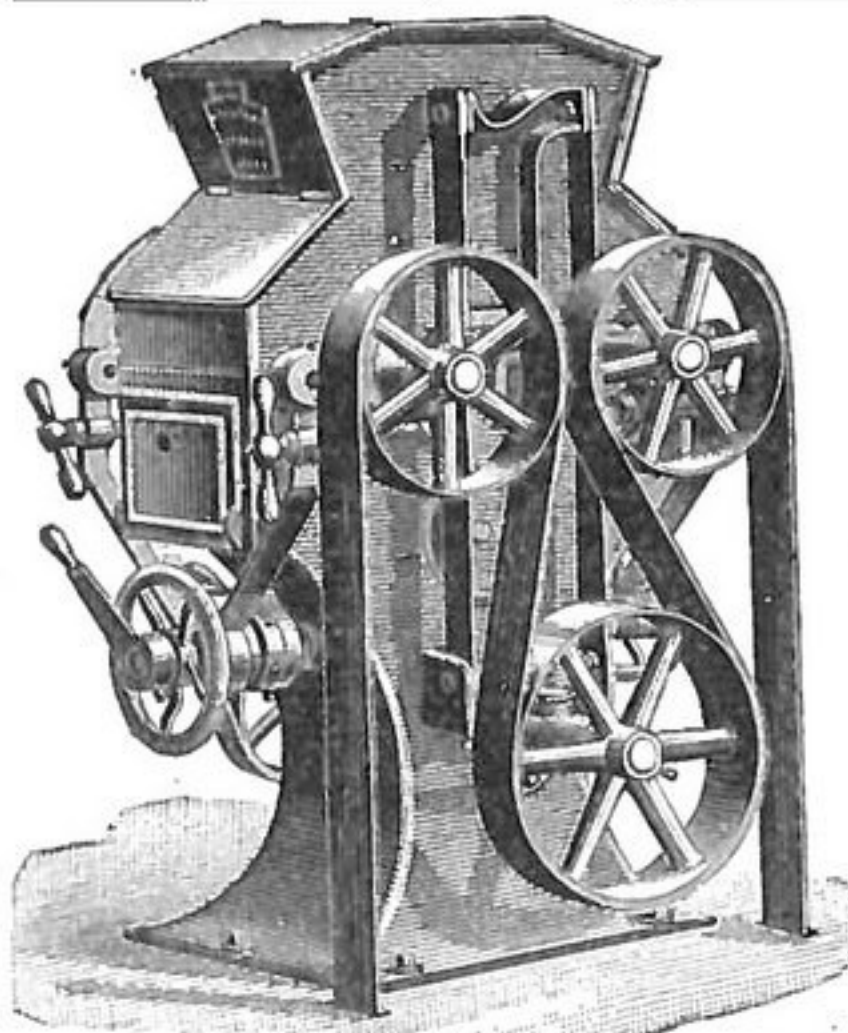
SEND FOR CATALOGUE—ILLUSTRATED AND DESCRIPTIVE.

## The Improved National Turbine Water Wheel

The Best for Economy; The Best for Durability; The Best for Power. ONE THOUSAND FIVE HUNDRED NATIONAL WATER WHEELS IN USE Prove that our Assertions are Supported by the Leading Manufacturers in the Country. Send for illustrated catalogue and prices to the manufacturers.



**The Case Wheel & Mill Co., Bristol, Conn.**



THE "KEYSTONE."

HONEST WORK.

GOOD FLOUR.

PERFECT MACHINERY.

THE J. B. ALLFREE CO., INDIANAPOLIS, IND.

FREETOWN, IND., April 7, 1890.

GENTLEMEN: We have had the mill you built for us in successful operation since November, 1889. We are glad to say that **WE HAVE ONE OF THE BEST 60-BARREL MILLS IN THE STATE.** Our flour will compete with any thing in the market; our percentage of low grade is very small and our clean up is as good as we ask. Your rolls, in our judgment, are superior to any thing on the market, being light running, easily adjusted and having other improvements which we fail to find on any other roller mill. Your "Success" Bolters, Centrifugal, Bran Duster, and in fact all the machinery gives perfect satisfaction. Every thing is smooth, cool and easy, making the least noise of any mill of same capacity we have ever been in when running. A farmer came in a few days ago and said that **our mill did not make any more noise than an easy running sewing machine.** We honestly believe that our line of machines has more points of excellence than any we have seen, which is evident from the fact that this is the second complete mill which you have built for us (or practically the firm), within four years, both of which are running, this latter being an improvement over the former one, and is what its name implies, a "Model Roller Mill." Wishing you the success you deserve, we are,

Yours truly,

TOBROCK, ALDENHAGEN & CO.

CLOSE FINISH.

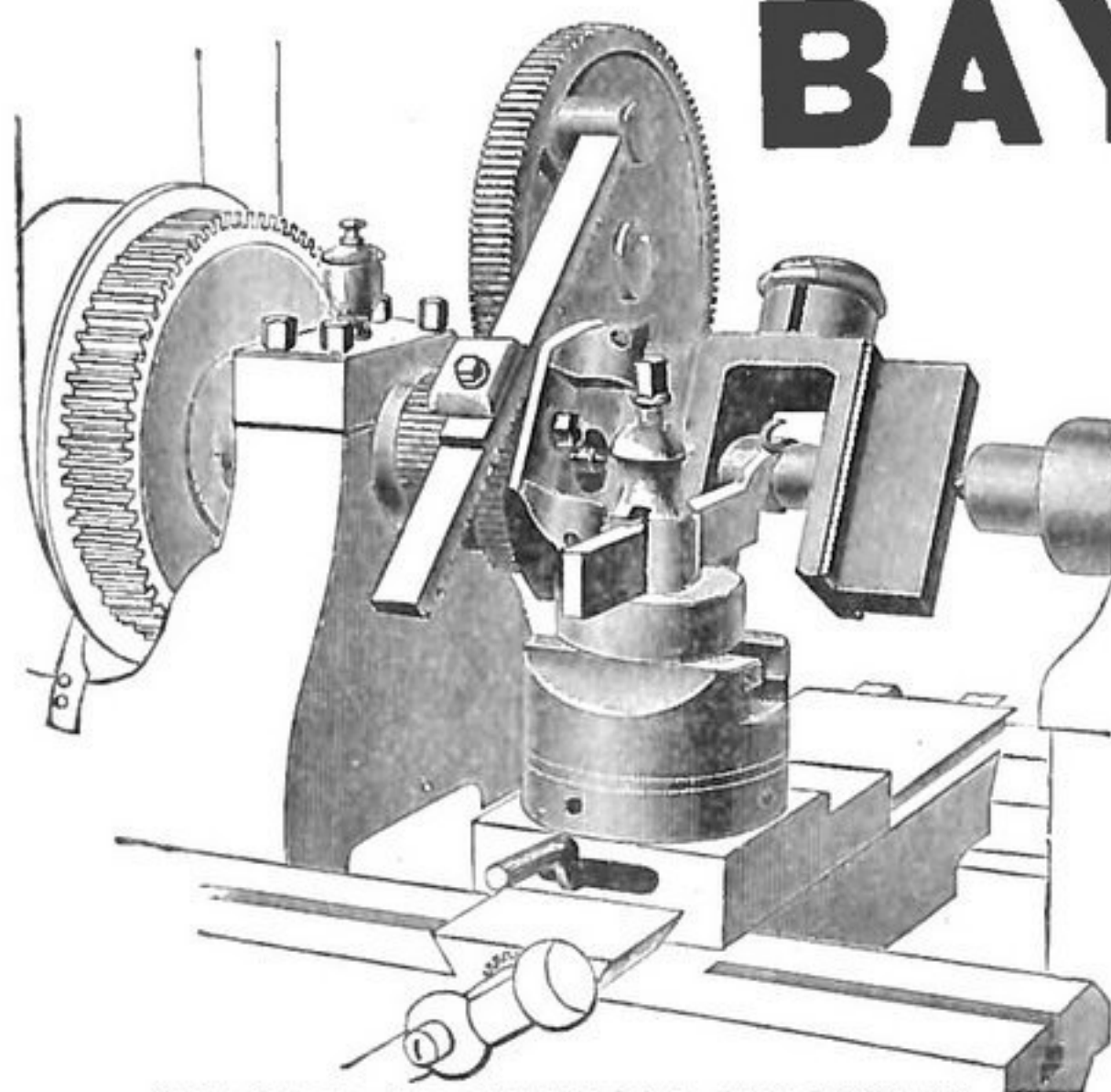
ADDRESS THE J. B. ALLFREE CO., 76 to 86 Shelby Street, INDIANAPOLIS, IND.

## BAY STATE IRON WORKS

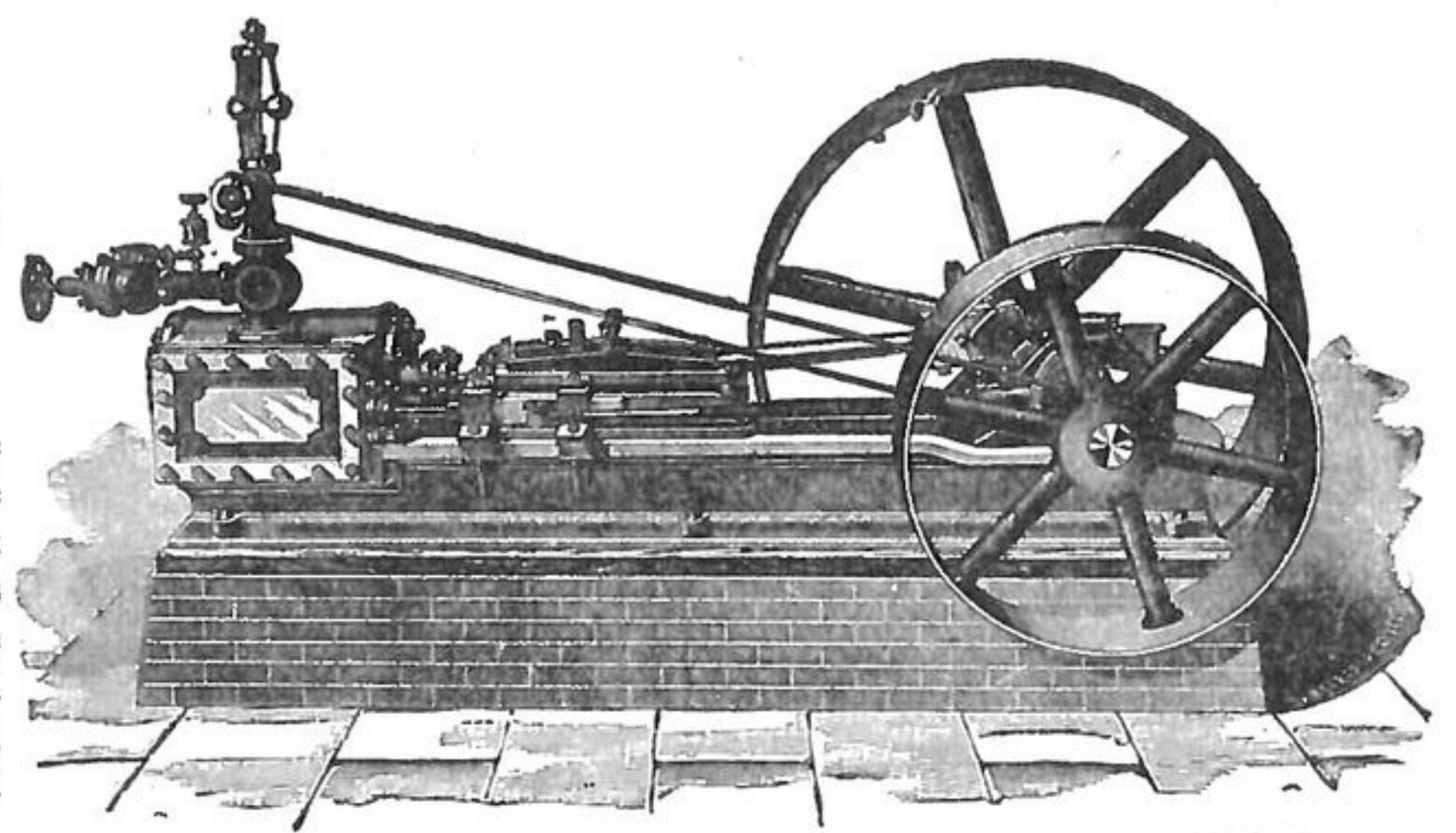
Manufacturers of—

Engines, Boilers,  
—AND—  
HOISTING MACHINES.

Also the Patent Cross-Head Machine and Acme Cube Pipe Tongs. We make either Center or Side Crank Engines, on same bed. Make engines from 5 to 250 Horse-Power. Have over 3,500 Engines and Boilers and over 1,000 Hoisting Machines in use, and all giving good satisfaction. Send for Catalogues and Prices.



PATENT CROSS-HEAD MACHINE.



IMPROVED DETACHABLE CENTER-CRANK ENGINE.

**Noble & Hall, Box 462, Erie, Pa.**



# OFFICE OF CASE MANUFACTURING COMP'Y COLUMBUS, OHIO.

## The Case Roller Mills. Over 14,000 Pairs in Use.

PLEASE READ OUR DESCRIPTION OF THEM, EVERY STATEMENT OF WHICH IS ABSOLUTELY TRUE.

PLEASE READ WHAT MILL OWNERS SAY ABOUT THEM.



The accompanying cut is a correct illustration of our latest improved Four Roller Mill. For fine work, great durability, simplicity, and general excellence, they stand "head and shoulders" above all others.

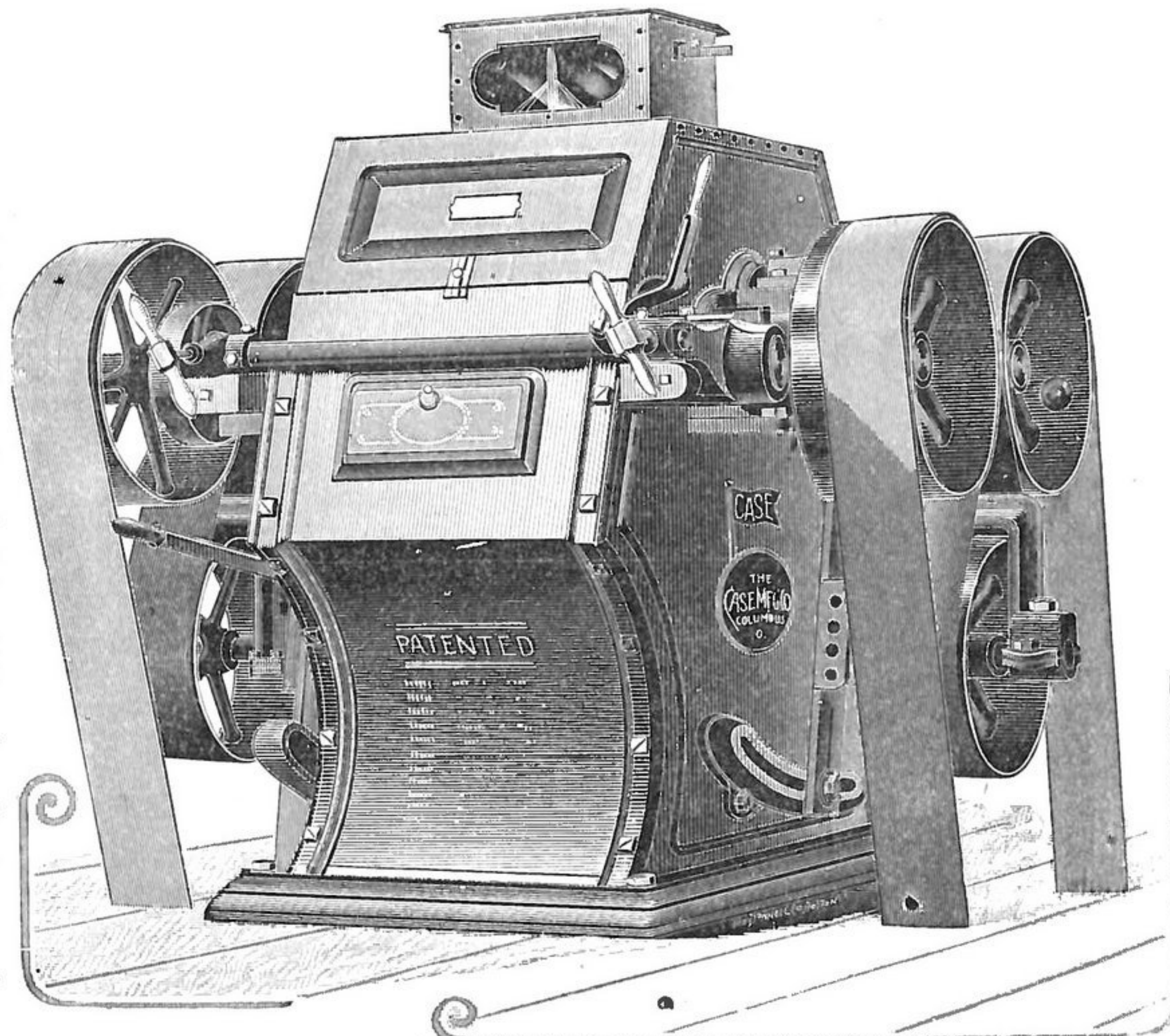
The frame is of iron with a heavy iron base.

The wood-work in top is of select cherry and black walnut, carefully shellacked and varnished.

The handles of adjusting screws and levers are finely nickel plated.

The joints are tight and dustless.

The adjustments easy, simple and perfect.



The roll bearings are wide and finely babbitted.

The belt drive is positive—no little short belts to slip.

The door for examining stock is a great convenience.

The arrangement for leveling rolls, simple and accurate.

The rolls can be thrown apart their entire length by one movement of the lever, and brought back again to original position, requiring no re-setting or experimenting.

Each machine is provided with our AUTOMATIC VIBRATING FEED, which requires no attention, and never fails to spread the feed the entire length of the rolls.



## Please Read These Testimonials.

LITCHFIELD MILLING CO., MANUFACTURERS OF FLOUR. }  
LITCHFIELD, ILL., Sept. 14, 1889.

Case Manufacturing Co., Columbus, Ohio.

GENTLEMEN: We are in receipt of your favor of the 11th inst., and in reply would say we have twenty CASE AUTOMATIC FEEDS on our Dawson and Allis Rolls, and we are greatly pleased with them. We have tested the Feeds thoroughly on different materials, and find they work as well on bran and germ and other soft materials, as they do on middlings. We have derived great benefit from the use of them, and can cheerfully recommend them to the milling fraternity. Yours truly,

J. C. EDWARDS, General Manager.

OFFICE OF A. J. MILLER, PROPRIETOR WHITE ROSE MILLS. }  
DEALER IN FLOUR, GRAIN AND MILL FEED. }  
METAMORA, IND., Nov. 19, 1889.

Case Manufacturing Co., Columbus, Ohio.

GENTLEMEN: Your Feed arrived O. K., and placed it in working order in a very short time. You have furnished me a daisy Feed. After regulating your Feed, it needs no more attention. It pays for itself in one week over the "Roller Feed" in cleaning up the

stock, and also insuring the superiority at same time. I forward you the amount of bill. Yours truly, A. J. MILLER.

TREZEVANT, TENN., Feb. 27, 1889.

The Case Manufacturing Co.

GENTLEMEN: We have five double stands of Rolls with Roller Feeds on all of them. A short time ago one of your agents induced us to try one of your Automatic Shaker Feeds. We find that it works much better than the Roll Feed, distributing the material the whole length of the Roll. We heartily recommend your feeds to any one wishing to put in new machinery.

Respectfully yours, FUQUA, HARRIS & CO.

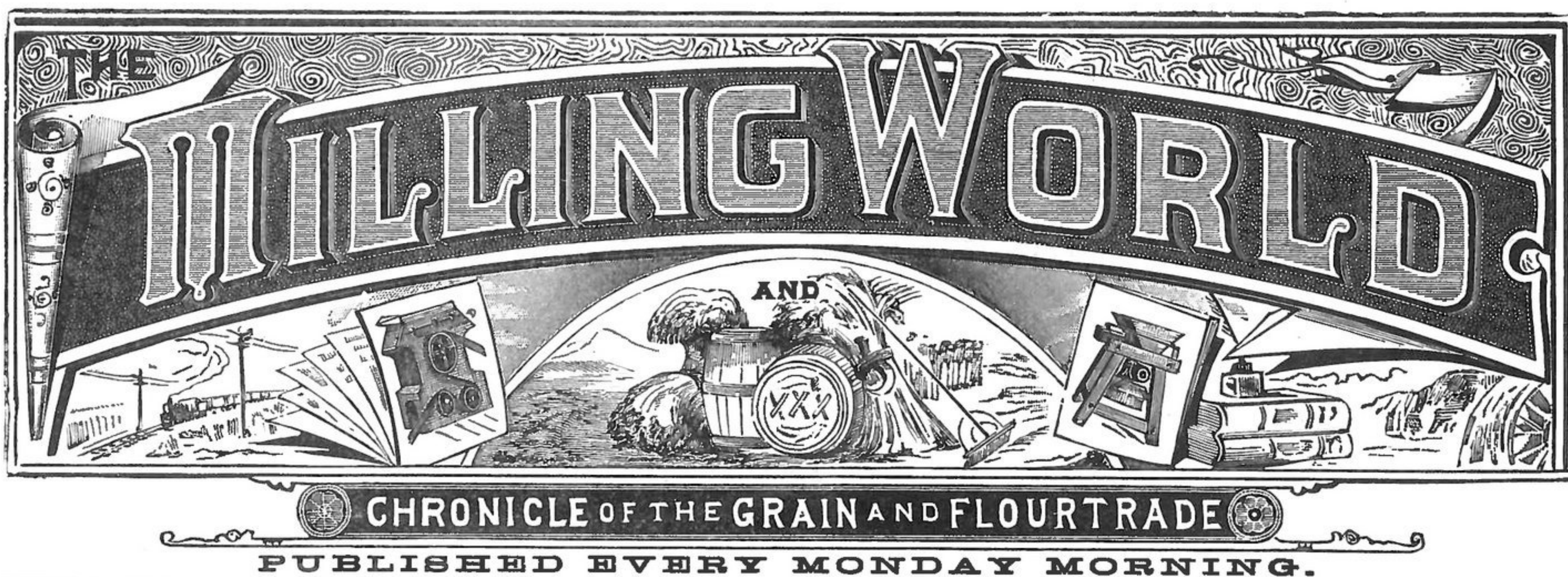
W. C. MANSEFIELD & CO., MERCHANT MILLERS. }  
CLEVELAND, TENN., Aug. 29, 1889.

Case Mfg. Co., Columbus, O.

GENTLEMEN: If we were to build a hundred mills, we would not permit any other than the "CASE ROLL" to enter them. They are the best roll on earth. Yours truly,

W. C. MANSFIELD & CO.





VOL. XXII. No. 8.

BUFFALO, N. Y., APRIL 21, 1890.

\$1.50 PER YEAR.

A GOOD deal of insincere demagoguery and a greater deal of utter rot are talked in connection with the farm-mortgage question. The farmers who have borrowed money are no worse off than are the millers, or any other men, who have borrowed capital to embark in business. They are paying their debts, and will continue to pay them, notwithstanding the hypocritical bosh and the quack remedies talked by the demagogues.

HIGHER export prices for both wheat and flour ought to be realized during the remainder of this year. The winter-wheat crop is doomed to be short, and the reports do not indicate an increase in spring sowing proportionate to the assured shortage in winter wheat. That Chicago grain-gambler, who, a month ago, was betting his bottom ducat that the American wheat crop of 1890 would turn out 580,000,000 bushels, will lose his money if his bet stands.

WHAT is the matter with Europe? What is the matter with Canada? Why can they not keep their citizens at home? Why must they send them to the United States by the hundreds of thousands every year? According to our pessimistic croakers, the condition of affairs in the United States is about as bad as it could well be, and yet, bad as it is, it seems to be so much better than the condition in other civilized countries that emigrants from all parts of the earth are flocking to our land to share our misery! The improvement in business in Europe, which cut down the number of immigrants into the United States last year, proved to be only temporary. The diversion of the tide of immigration to the Argentine Republic last year aided to reduce the arrivals in the United States. Both these causes are not sufficient to keep down the flood of humanity pouring into the United States from all quarters of the earth, and it is to be feared that the immigration into this country may reach, during the present year, the highest notch ever recorded. What is the matter with Europe?

THE wheat-gambling "bears" have been punished severely. These wreckers of values have impudently attempted to ignore the damage done to the winter-wheat crops. They set up their unqualified denial of facts against actual and widely published information. They tried to go on hammering down prices when all the conditions called for higher prices. The whole tumult is an illustration of what would be the regular thing in the grain markets if there were no government reports, and if everything were left to the gamblers. The monstrous falsifications of the "bears" since the last freeze in the winter-wheat regions show what the public might expect in case the gamblers managed the crop reports. Well, the "bears" are punished, and punished severely. They invited a tussle with "Old Hutch, Cold Facts and Company," and their hides are on the fence. It is well. Meanwhile, long live the Dodge crop reports, the only things in the shape of crop reports in the United States that are worthy a moment's credence, or represent actual informal information gathered and disseminated by wholly disinterested agents.

NIAGARA FALLS is crazy over the project of creating a great water-power in that village. Prominent capitalists are at the back of the project, and prominent scientists are working at the problem of utilizing a fraction of the enormous power of the great cataract. Real estate has jumped 1,000 per cent. The project implies the concentration of a large number of manufacturing plants in the little village of Niagara Falls, and also the transmission of power to Buffalo by 20-mile cables laid on the bed of the river. The tunnel at Niagara Falls will make that village a most desirable spot for flour-makers, and all other "supreme milling centers," from Budapest to Minneapolis, may well begin to tremble in their boots and shoes when the tunnel project "gets up a move." The scheme will give Niagara Falls sufficient power to grind all the spring wheat grown in the United States. The power will be enormous, incessant, unaffected by any thing short of an earthquake severe enough to wreck the cataract, and economical in the extreme.

ACCORDING to the grain-gamblers and some thoughtless grain-growers, who have recently taken to echoing the sayings of the gamblers, the government crop reports ought to be abolished. Suppose there had been no government report a week ago, when the wheat markets were excited and unsettled, what would have been the result? The market had information enough to warrant the belief that the condition of the winter-wheat crop is very far below the average. The "bulls" were in the lead on that information. The market would have been absolutely in their control, and they could have done what they willed with prices, had it not been that the April crop report by the governmental bureau was due. That report stood in the way of their "bull" plans and powers. It prevented a dangerous inflation of prices. It held the market to natural influences and kept trade from the general demoralization that would have been the inevitable result of unhindered "bull" manipulation. In the same way dangerous "bear" operations have been prevented by the Dodge reports. Such instances justify the contention that the Dodge reports are valuable. There is nothing to take their place. Such guesses and pretended estimates as are sent out by "Bradstreet's" and other self-called reporting agencies are not to be compared with the Dodge reports in any way. They never are worthy of the slightest credence or reliance excepting when they crib the figures from the Dodge reports. The government reports are the best. They can not be worked in the interest of either the "bulls" or the "bears." They contain real information furnished by disinterested reporters. All the other reports, guesses, estimates, computations, exaggerations and minimizations are open to suspicion. Let the Dodge reports stand. The truth about any crop, whether wheat, corn, oats, rye, cotton or potatoes, can not be harmful, while the irresponsible reports of the gamblers in produce must always result in loss to the producers. The lunatics, who charge the prevailing low prices for agricultural produce all over the world to the monthly crop reports of the United States government, may quite as justly charge it to the reports of the Vienna Seed Congress or to the editorials in the Timbuctoo "Daily Cannibal."



# The DAWSON ROLL WORKS CO.

## FOUNDERS & MACHINISTS,

—MANUFACTURERS OF THE—

# Dawson Roller Mills

—AND FURNISHERS OF—

## CHILLED IRON ROLLS

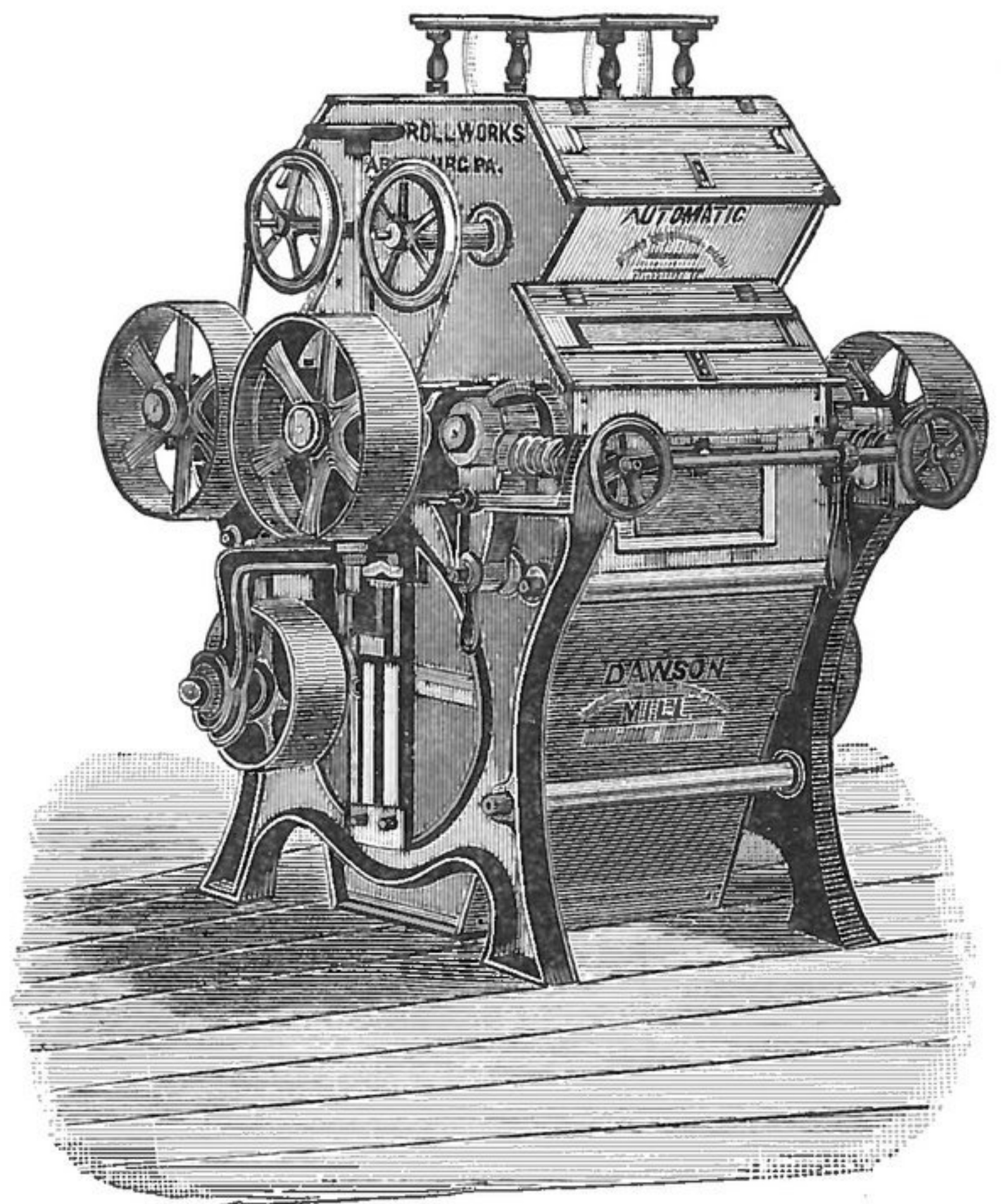
WITH DAWSON PATENT CORRUGATION.

ALL STYLES OF FLOUR MILL ROLLS RE-GROUND AND  
RE-CORRUGATED WITH ANY FORM OF CORRUGATION.



We have had large and extended experience in grinding and corrugating chilled rolls for milling, and have one of the largest and most improved plants in the country for this work, which enables us to meet the most exacting requirements of the trade promptly.

ORDERS AND CORRESPONDENCE SOLICITED.



# DAWSON ROLL WORKS CO.

South and Short Streets,

HARRISBURG, PA.

# The Cowles "Reliable" Sectional Wood Pulley



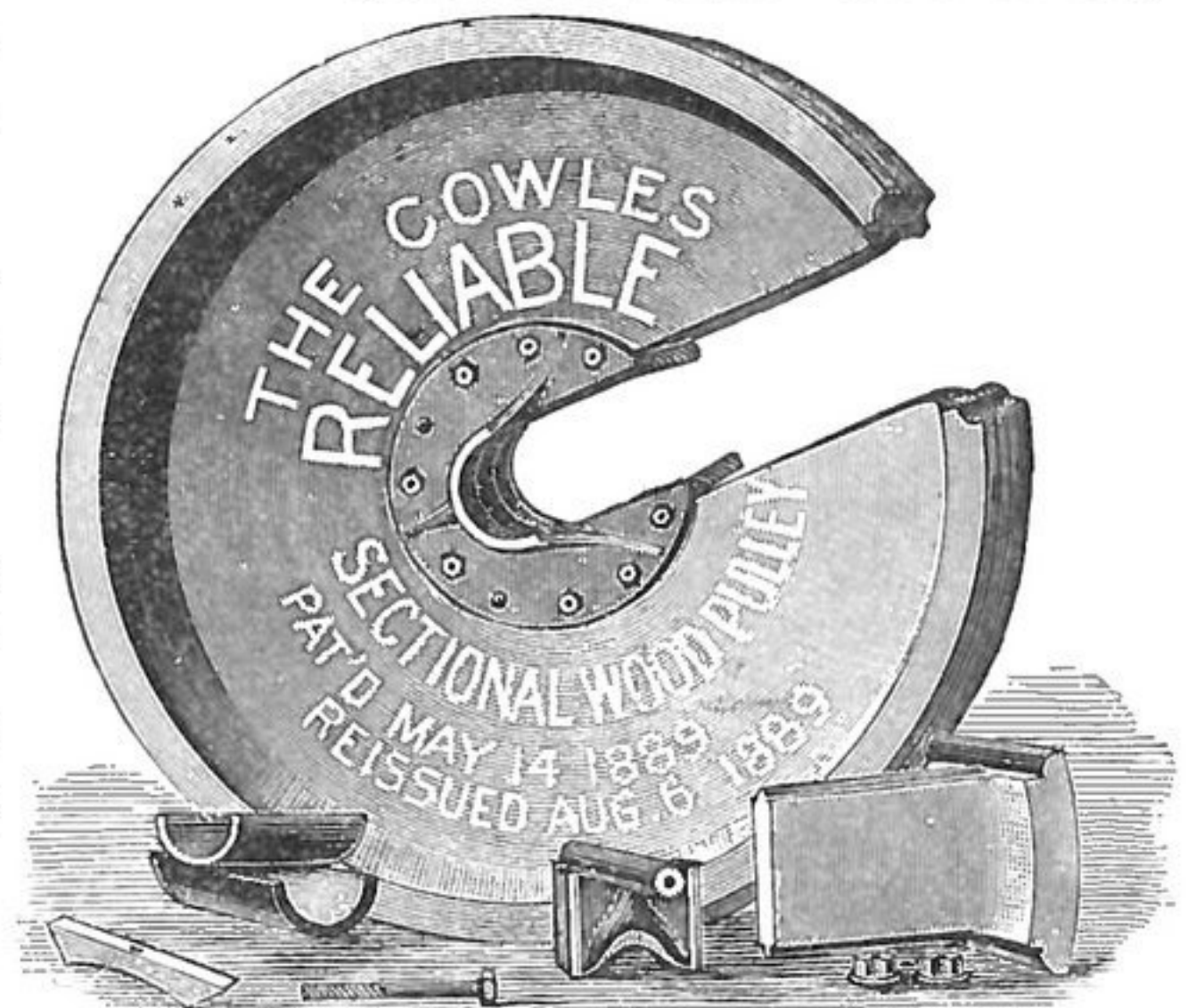
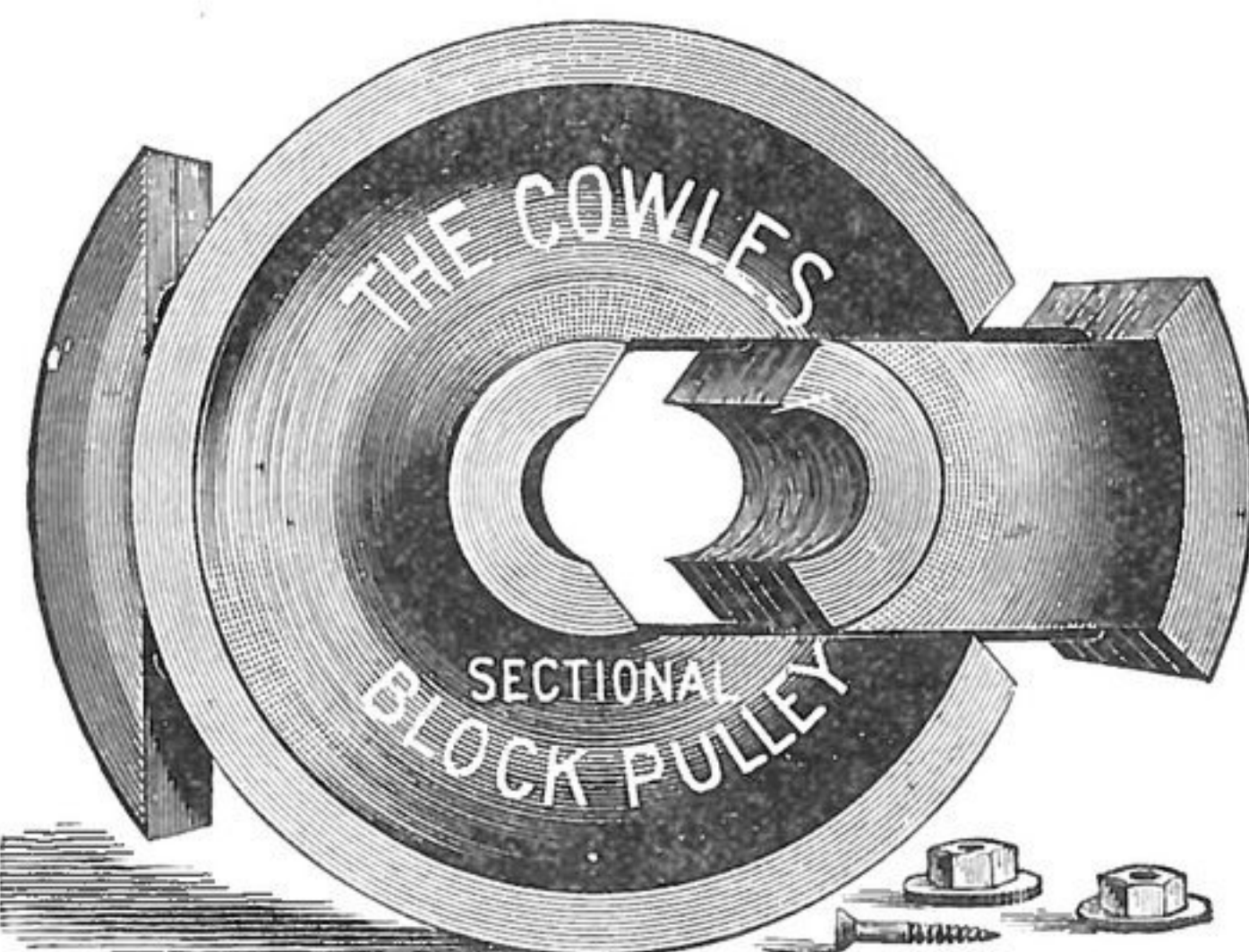
Web made of several layers glued together with grain crossing, and faced up on both sides. Iron flanges securely bolted to web. Rim put on after web has been trued up. Web and rim turned on inside and face, making perfect running pulley. Rim supported entire circumference. Positive self-gripping device for securing pulley to shafting, which is self-centering, and can not slip with wear.



A wooden rim pulley transmits from 30 to 50 per cent more power with same belt than an iron one.

Two-thirds lighter than iron, bearings will wear longer and the expense for lubricant will be less.

Having solid web, there is no air resistance. The "Reliable" can be placed on shaft or position changed in one-fourth the time required with any other pulley.



EDWARD GERMAIN, SOLE MANUFACTURER, SAGINAW, MICH., U.S. A.





PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets,  
Over Bank of Attica.  
McFAUL & NOLAN, - - - PROPRIETORS.  
THOMAS MC FAUL. JAMES NOLAN.

**SUBSCRIPTION.**

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

**ADVERTISING.**

Rates for ordinary advertising made known on application. Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

**EDITOR'S ANNOUNCEMENTS.**

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

**THE MILLING WORLD,**  
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

**SITUATIONS WANTED.**

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

**SITUATION WANTED.**

Head miller with over 20 years experience want to make a change this spring. Address, A. MILLER, 67 Weaver Alley Buffalo, N. Y. 4t

**WANTED.**

A situation to run a 50 to 100-barrel roller mill. Pennsylvania, New York, Ohio and Michigan preferred. Address MILLER, Box 75, Union City, Erie Co., Pa. 36

**WANTED.**

A situation in some flouring or grist mill, by a man who has had good experience with the buhr system. Can furnish best of references. Address, THOMAS H. NICHOLAS, DeRuyter, N. Y. 811

**SPECIAL ADVERTISEMENTS.**

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office 10 cents must be added to pay postage.

**FOR SALE.**

One new Hominy Mill, capacity 5 to 8 barrels per hour. Address J. C. DIXON, Pocomoke City, Worcester County, Md. 7

**WANTED.**

The address of Mr. Buhr Miller who was formerly a citizen of Prosperity removed to Adversity, and when last heard from was in Despondency looking for a job. By the will of his uncle Oliver he becomes heir to a modest fortune to obtain which he should address the FLENNIKEN TURBINE COMPANY, Dubuque, Iowa, Administrator. (Exchanges please copy.)

**MILL MACHINERY FOR SALE.**

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.  
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.  
One 14-Inch Vertical Feed Mill; best make, new, a bargain.  
One No. 6 Dustless Separator; new, a bargain.  
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.  
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.  
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.  
One No. 2 Purifier. New. Best make. A bargain.  
One 20-Inch Portable Mill.  
One 18-Inch Double Gear Portable Mill.  
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

**FOR SALE CHEAP.**

One 36-In. Iron Frame Portable Mill, French Burr Stone, Used about 2 months.  
One 20-In. Vertical Mill, French Burr Stone, Used about 30 days.  
Three Pair 42-In. Old Stock Feed Stones.  
FOR PARTICULARS ADDRESS,

**SAMUEL CAREY, 17 BROADWAY, NEW YORK.**

**FOR RENT.**

Clinton Mills, at Black Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 311 Main Street, Buffalo, N. Y. 6tf

THOSE philanthropic grain-gamblers, daily news sensation mongers and cognate fools and frauds, quacks and demagogues, who are crocodilianly weeping over "farm mortgages," ought to turn their attention to "city mortgages." The farmer is not mortgaged so nearly to the death-point as the average business man and property holder in the city. If the government is to go into the fraternalism business to aid the mortgaged rustics, let the aid be extended to the mortgaged urbans as well. If the grain-grower is to be aided, so should the grain-grinder be aided.

GREAT BRITAIN'S Indian wheat "enterprise" gets another setback this season. According to late semi-official reports from India, estimates from all the provinces but five place the present crop 35,000,000 bushels below that of 1889, and 70,000,000 bushels below that of 1888. It is hard to battle with the elements. It looks at this writing as though the present wheat crop in India would furnish not a bushel for export. If the American crop comes down far below an average, and the indications that it will are strong at this time, wheat prices next fall will soar to old-time figures.

THE Minneapolis "Yahoo" editorially advises the Consolidated Roller Mill Company to "come off," as it were, or to call their battle with their opponents a "draw." What would the world do without the "Yahoo" to sling in unasked-for advice? The "Yahoo" is thought to believe that even the laws of gravitation would act more satisfactorily under the direction of the "Yahoo" editor! O! When a small person gets a big head, it is time to enlarge the interstellar spaces, so that he can swing around without chaotically discombobulating the universe with his megaloccephalic protuberance!

INTEREST is felt in the proposition to build a ship canal around Niagara Falls in New York, to render American shipping between Lakes Erie and Ontario independent of the Welland Canal. There are many things to be said in favor of building the canal on the American side. It would make the grain growers and handlers of the Northwest independent of the extortions of the Dominion government in the Welland Canal tolls. If there is any good reason why Canada should build a second canal between Lakes Superior and Huron, when the American canal between those bodies is free to Canadian shipping, certainly there is good reason for the United States to build a second canal between Lakes Erie and Ontario, as the Canadian government levies discriminating tolls on the Canadian canal between those two lakes. If the United States has her own canal between Lakes Erie and Ontario, it will not be so easy for Canada to whip her in case of war.

CERTAIN esteemed cotemporaries, who considered it proper form to "jump onto" Mr. George T. Smith, of Jackson, Mich., when the Geo. T. Smith Middlings Purifier Company assigned, will be very greatly pleased to learn that that vigorous gentleman is "still on earth," that he is again in business, that he retains control of the patents on the famous Smith flouring-machines, and that he is bringing out something entirely new and revolutionary in mill-building. Those cotemporaries, who read the riot act over what they considered the business and financial corpse of Mr. Smith, will probably soon have an opportunity to explain why they kicked him when they thought he was down. Business reverses do not kill men like George T. Smith. Having once worked up from the bottom to the top of the business ladder, he will surprise those who know him best if he fails to climb again. He has still his experience, his intelligence, his ambition and his indomitable courage, and he will continue to be a familiar figure to the flour-makers of the United States. It will be interesting to watch the treatment accorded to him by some of his ungenerous and malicious critics, who gloated over his downfall.



## FOLLY TO THE FORE.

A. B. SALOM.

DEMAGOGUES and irresponsible fanatics have once more gained control of the organizations that are alleged to be devoted to the best interests of labor. Folly is to the fore. The pretended friends of labor are once more engaged in strangling labor, in checking its progress, in depriving it of the sympathy of the public, in making it appear wholly senseless, in destroying its last claim to be considered an interest that knows when it is well off. The suicidal mania, fostered through the past ten years by the professional fanatics in command of organized labor's forces, has broken out. Labor, without income, without accumulated funds, without anything to warrant the movement, has been led to the deliberate attempt to extort money, which it does not propose to earn, from the employers of labor, who are, in one sense, the community at large. For years these visionary cranks have been preaching the possibility of forcing employers to shorten the day of labor from ten to eight hours, while they demand that they shall receive for the eight-hour day the same wages they received for the ten-hour day.

The consummation of these years of proselyting, by these monstrous quacks, on this monstrous doctrine, is about to be witnessed. The first day of May, 1890, has been for years advertised as the day on which labor should assert its supremacy, on which workingmen should invite an open struggle with the forces of capital and the necessities and conveniences of the community, and on which should be inaugurated an utterly impossible and insane "movement to better the general condition of labor." That date is here. What shall the event be? Already the fanatics have made a commencement. Chicago was, naturally enough, selected as the city in which to open the proposed revolution. The carpenters of that city were induced to take the lead. Before the date selected as the opening of the labor millennium, they began operations, leaving their work in a body, absolutely stopping all building, in a great city, at the very opening of what promised to be a most prosperous season, and thus opening the battle.

What are they losing at present? A Chicago newspaper, referring to the strike, says: "Six-thousand carpenters, who were working 10 hours a day at 35 cents an hour, quit work Monday morning that they might get, through the persuasive powers of a strike, 8-hours' work at 40 cents an hour. Monday's idleness took \$20,000 out of their pockets, yesterday's took \$20,000 more, and if they do nothing to-day they will be out \$60,000 by sundown. At least 6,000 men belonging to other trades, earning on the average as much per day, have been thrown out of work by the action of the carpenters. By to-night their losses will foot up \$60,000 more." It is computed that the 12,000 or more skilled laborers, directly concerned in building operations in Chicago, actually lose \$50,000 a day while they are idle. Their loss for the seven months of the season will be not far from \$10,000,000, in wages alone, to take no account of the amounts of debts which they must contract for the necessities of life during the strike. Those among them who own their own homes, and have savings deposited in banks, will be compelled to consume both their savings and their homes. Those who are in debt for their homes will be dispossessed. Those who rent homes will be evicted when they fail to pay the rent. These are some of the inevitable present losses, and they ought to be sufficiently large to make even misled Chicago laborers dubious about the event of a strike on the proposed scale and on the adopted basis.

Another question suggests itself. What will be their future loss, in case this strike fails? Every individual, who studies the labor question, and who has the real interests of labor at heart, will at once perceive that, enormous though the present losses may be, they are insignificant in comparison with the inevitable future losses. Labor has had, and it still has, the sympathy of the general community in all wise efforts to better its conditions. Its grossest crimes against itself and the community have been leniently overlooked. Its special pleadings have been accepted at the bar

of public common-sense. But there will be a limit at last to public forbearance, and in foolish struggles, like the present one, labor threatens soon to push forbearance to that limit. It does not answer the question to say that the public can not get along without the services of labor, for labor can not get along without the recompense which it receives for those services to the community. If labor quits serving, it also quits earning. All the damage labor can possibly inflict upon the community in the end falls back upon itself. Should the Chicago "revolution" spread throughout the country, the end will come suddenly. So long as one center only is idle, other centers not idle may contribute means to continue the contest. A general idleness would throw each center upon its own resources, and the result would be the speedy ending of the foolish struggle.

Ought the present movement to succeed? On general principles, Yes. On particular considerations, No. The general principle of shorter days may be conceded to be correct, so far as giving laborers every possible chance to improve themselves is concerned. Men should be allowed to work as few, or as many, hours for a "day" as they wish. That principle may be safely granted. The general principle, that a man has the right to demand the highest rate of pay for his services, may likewise be granted. It is sound. It is humane. Further than these two general principles it is unsafe to go, for the next stage of the question introduces particular considerations of enormous importance, which can not be ignored safely or sanely. The laborer has the inherent right to refuse to work beyond the limit of comfortable endurance, whether that limit be a day of eight, or five, hours, but he has not the right to forbid the employer to engage other laborers to carry on the work that is left uncompleted because of his short-day inclination. The laborer has the right to demand the highest obtainable wages for his day of service, but he has not the right to demand wages for hours he has not spent in labor.

On general principles the laborers may be right, but certainly they are wrong in the particulars, in the details, in the inevitable conclusions flowing in natural sequence from their acts and demands. They demand what is out of all reason. Their "eight-hour day with ten-hour pay" means that the employer, who has been handling a dollar on the divisional basis of 95 cents to labor and five cents to himself, is to be called on at once to manipulate his dollar so as to allow labor 114 cents and himself six cents out of the original 100 cents! Just how this hugger-mugger flimflam is to be accomplished, the demagogues and mountebanks among the misled laborers do not even attempt to say. This is the one particular in which labor is grossly, incorrigibly wrong. This is the rock on which the demagogues will wreck the ship of labor. They have chosen an unfavorable time. They have ignored common-sense. They have made unreasonable demands. They are on the wrong path in every particular, and if they fail, as they certainly will, in their present and prospective campaign, they will awaken to the fact that they have really lost, not only their present foolish fight, but all that they have gained in the past decade in the esteem and sympathy of the community at large.

## COTEMPORARY COMMENT.

C. A. Pillsbury, manager of the English syndicate's mills at Minneapolis, went to Philadelphia recently for the purpose, it is said, of obtaining control of the Washburn mills at Minneapolis. As Mr. Pillsbury will not deny the report, there must be some truth in the statement. He seems to be anxious to run the milling business in this country. If he gets control of a few more mills and then succeeds in having the National Association adopt the clause allowing mills to be represented according to their capacities, he will surely hold the position of dictator.—*Chicago "American Miller."*

Often marriage is like two drops of fat, which swim around on top of the water without ever flowing together.—*Philadelphia "Anti-Adulteration Journal."*

Some of the people objecting most to the previous Washington statistics were most emphatic in pronouncing the statistician level-headed now. If the resolution for the sup-



pression of Dodge reports, that is to come up for a vote of the Chamber at high-noon Tuesday, had not been offered by the bulls, they are so pleased now it might not be. But, now that they are committed to it, they will have to vote for it. Dodge's former friends, the bears, are disgusted and may turn in and vote for it too. It must be admitted that the statistician's ways are past finding out.—*Minneapolis "Market Record," April 11.*

Diethylsulphonedimethylmethane is the correct name of the drug generally spoken of as sulphonol. There is really no need of the polyphonous polysyllabist of THE MILLING WORLD ever running short of big words.—*Kansas City "Modern Miller."*

#### POINTS IN MILLING.

WHY do millers fail in business? If there is any business in the country that should be regularly profitable, it is flour-making. There is always a supply of wheat sufficient for all the needs of the nation. The consumers must have supplies regularly. It is well understood that they must and will pay prices for flour proportioned to the prices paid for the grain, so that, generally, the margin of the miller's profit is, or ought to be, a regular and constant thing.

OF course that margin is affected considerably by the relations of demand and supply, by the small or large exportation of flour from the country, by the quality of the grain, which controls the quantity of grain necessary to make a given quantity of flour, and by certain other conditions. Notwithstanding this, some millers will fail in business while their neighbors, laboring under the same conditions, catering to the same trade, handling the same grain in the same quantities and at the same prices for material and output, will make money. What is the cause of such an effect?

My own observations, made in hundreds of mills, lead me to believe that several leading causes may be assigned. Summing up the notes made on hundreds of mills, of both modern and ancient construction, which I have visited, and in which I have had an eye open to all the factors in the business of the average flour-maker, it strikes me that the most potent cause of failures in milling is the badly-planned institution. My notebook gives the plan of one 250-barrel mill, which has, in ten years, been owned by three different millers, and in the hands of each one was a failure. In the case of this mill the fault was in the plan, or, rather, the utter lack of a plan, of placing the power-plant and the machines. Everything in the establishment was as far out of its proper place as it could be, and remain inside the walls and under the roof of the building. The boiler-room was placed so as to necessitate extra expense in unloading fuel. The engine was located quite as badly as though a lunatic out on vacation had been in charge at the time of building. All the cleaners, roller-mills, purifiers, bran-dusters, packers and other machines were ingeniously misplaced, with the effect of making all handling of stock needlessly expensive. Conveyors were put in wrong, or at least in such a way as to call for the greatest possible length of spouts, and at such pitches as to insure the slowest movement of stocks. Everything was the right thing in the wrong place. Nothing was the right thing in the right place. All this ingenious misplacement meant an easily computed difference in the cost of passing the grain through the mill from the bin to the bag or barrel.

No matter how carefully the plant was operated, nor how high the quality of the grain used or of the flour produced, the plant was worked under disadvantage. The extra expenses incurred at the fuel heap were repeated at the grain-door, at the cleaning-machines, at every point where the material moved. So long as the extra expense incurred through bad planning did not exceed the normal margin of profit for the time being, the owner could keep afloat, but everything that narrowed the normal margin for a time brought the balance on the loss side of the business account of the plant.

THE man who owned it first failed. His successor failed.

A third became owner at a time when milling was fairly profitable. He floated until times became bad, and he failed. The fourth, the present owner, on coming into possession, saw, just what the others had seen, that the trouble was a radical one, a trouble in the plant itself, and he did not attempt to carry the trouble, as the others had tried to do. He went to work and arranged the mill on a correct plan before starting up, and the result is that, although the best times he has seen were poorer for milling than the poorest times seen by his three predecessors, he has made money, and is now making money.

NOT all badly-planned mills are so badly planned as this one, but any mill badly planned at all is too badly planned. Not all mills fail so badly as this one did. Generally, in cases of seemingly "mysterious failure," the trouble may be traced in some degree to the planning of the mill. If money goes into grain at 100 cents on the dollar and comes out of flour and bran at 95 or 90 cents on the dollar, look, first of all, at the scheme of the mill. In nine out of ten cases search at once reveals the trouble in the plan.

THE remedy for this evil is simple and easily applied. It consist in the service of a competent milling engineer, whose business it is to plan economical and highly efficient mills. That service is indispensable, unless the owner of the mill himself is such an engineer.

MY next conclusion is that the second potent cause of failure is the employment of careless, ignorant, cheap and incompetent millers, clumsy, slouchy, hammer-handed, club-fingered, dense-headed and awkward men. Such men destroy machinery and belting, tear bags and bolting-cloths, and subject a plant to wasteful stoppages for expensive repairs, and they load the owner down to bankruptcy by the simple mechanical process of using up in one year an expensive equipment that ought to last three or five years under proper handling.

THE remedy for this evil is so easy and so sure that it is surprising to find owners unwilling to apply it. It consists in throwing the incompetent men on the scrap-heap or on the tramp-way, before they throw the mill on the scrap-heap and the owner into bankruptcy. A good portion of the failures in milling may be charged to this cause.

THIRD in the list of potent causes of failure I place the simple term "waste." The mill may be correctly planned and manned by competent men, but it will fail utterly, or at least not succeed brilliantly, if this element, waste, is not looked after. I recall one model plant, a 200-barrel mill, one of the most admirably planned plants I have ever seen, which did not pay. I knew where the trouble lay. The owner could not figure out why his profits were so small. I offered to show him. We began at the fuel-hole. I showed him the wastage of coal daily. He jotted down the figures. The examination went on through the plant, wastage of steam, of oil, of grain, of flour in bran, of bags and bolting-cloths torn out rather than worn out, all being jotted down in order as revealed. We went from the mill to the office, and the owner summed up the evident, tangible, undeniable wastage going on daily in his mill. At the conclusion of his computation he exclaimed: "This visit will save me thousands of dollars! Next Monday I will go into that mill and lay down rules for every man in it, and I hope to see that the rules are lived up to! These men have been robbing me by their wastefulness of things that have cost me hard dollars! I'll end it!"

HE did end it. Since that time he has made regular inspections of the mill, and he is richer by thousands of dollars in consequence of his prompt work in crushing the evil of wastage. When his eyes were once open to the grosser forms of waste named, he began to see also subtler forms of waste in the plant, and he cured the evils great and small.

I CAN not leave this subject without naming one other im-



portant cause of failures, and that is the miller's ignorance of his market, his carelessness of the wishes of his customers. Too often the miller thinks he knows what his customers want better than they themselves know. He will have a demand for one grade, but will try to make the customer accept some other grade. He forgets that he is a caterer, not a teacher, that he is manufacturing flour, not creating tastes for this or that particular product of his mill. The miller who ascertains what grades are in most general use in his vicinity, and who produces those grades, will be able to secure the largest business. I know one mill, in a back-country town, whose owner failed simply because he would not furnish his customers what they wanted. Failure is to be looked for in all such cases.

THERE are other causes of failure, but they are generally closely connected with one or more of those named. The miller must buy well, or he will fail. He must sell well, or he will fail. Like other business men, he must seek success, not let success seek him. Success is a queer Dick, but he never is so queer as to thrust himself upon men who are not looking for him. If he comes to a man at all, it is because the man has sought him and found him, and compelled his surrender.

#### IMPROVEMENTS IN MAKING FLOUR.

Australia comes to the front with a new patent for "Improvements in the Manufacture of Flour." The inventor is James Ames, Sydney, New South Wales, and his patent is No. 3,963 in Great Britain. His invention may be judged from the following details: In the modern methods of milling or grinding wheat to obtain flour therefrom, the wheat undergoes a continuous reducing and dressing process, whereby the flour obtained is characterized by the presence of close, regular and finely pulverized particles, and, generally speaking, a "greasy" texture. This is alike true of roller and stone flour, but especially of the former, and is the result of the flour being ground so uniformly small, which may be attributable to the desire of millers to satisfy the popular error that the finest flour is the best, and that whiteness is a proof of its quality. Flour thus produced is not, however, the best suited for bread-making or for similar purposes, because, in consequence of the extreme fineness of the particles the ferment acts simultaneously, rapidly and exhaustively on the dough before it is possible to manipulate it and place it in the oven; this action often causes the bread produced to be dark, sour and heavy. The fermentative action should be sustained until arrested by the heat of the oven.

This inherent defect in uniformly fine flour may be remedied by adding particles of flour of a coarser texture and of various gauges, such admixture causing fermentation to continue and be sustained during the progress of the several operations which the dough must undergo before it reaches the oven, and likewise causing its continuance until the action is arrested by the heat. The reason of the desired effect being thus accomplished is attributable to the unequal action of the ferment on the grains of flour, the smaller being acted upon more quickly than the larger particles, which require a longer time for the ferment to penetrate into their substance, a comparatively continuous fermentative action being thus kept up. The larger particles, which are not entirely spent so soon as the smaller ones, offer new acting surface to the ferment until the action thereof is arrested by the heat. If, therefore, it be found that, under certain conditions, the fermentative action does not continue sufficiently lively until the dough reaches the oven, the defect can be remedied by adding to the flour a proportion of coarser grade semolina, which will furnish new material for the action of the ferment, and maintain the fermenting process for the requisite period. By the use of this system those elements or properties are retained which are necessary for the nourishment of the various organs of the human body, and which contain the most nutritious portions of the wheat. Such flour also absorbs more water than is absorbed by fine flour, and produces a light and bulky loaf, which is rendered

spongy and porous to a remarkable degree by the longer duration of the fermentative action.

I am aware that, under the old systems of reducing and dressing flour, in which the finest sieve had no more than 65 meshes to the inch, a material of irregular gauge was obtained, because, during the reducing process, much of the grain was necessarily though unintentionally ground finer than the standard gauge; the presence of the finer particles in the finished product being attributed both to accident and to causes which the miller could not control with the aid of the apparatus with which he was then provided. As time went on and improved machinery was brought into use, a constantly increasing tendency to turn out a finer and whiter flour became manifest, until at the present day the flour produced is a fine, dusty, pulverulent body of snowy whiteness almost entirely free from fiber. The disadvantages attendant upon the use of flour so manufactured have been already referred to. While the old process remained in vogue, the bread, although inferior in color, contained greater strength and, it is affirmed by many, possessed a better flavor than bread manufactured from the more modern material; the color is, however, the chief drawback to the use of the old and coarser flour. Now my invention mainly consists in a system or process by which opportunity is afforded for removing the "fiber," which is the cause of discoloration in the old-fashioned flour, while at the same time preserving in the flour the beneficial qualities which it would retain if manufactured according to the old process. In addition, it offers to the miller a system or process under which he has full and absolute control, practically speaking, of every particle of flour which enters the finished product; thus enabling him to produce a flour containing pure unreduced semolina in whatever degrees of fineness and in whatever proportions he may require or prefer.

A study of the grades and proportions of flour hereinafter specified will show that the system or mode of procedure followed, which is essential to the successful working of this invention, consists in separating and carrying to straight-grade flour the finest products of first reductions and the highly purified finished products obtained from the cut-off and tails or middlings, which contain in a large proportion unreduced semolina. In making a flour for bakers' requirements, I use the grades of semolina and flour, and in the proportions thereof hereinafter stated, as I find the best results are obtainable therefrom, but I wish it to be understood that, since this mixture is in effect a mechanical process, such quantities must only be regarded as approximate, and may therefore be varied in a greater or less degree according to circumstances or as the experience of the miller may dictate. I find that variations from the specified proportions are most marked in opposite cases, as with hard and soft wheat or wheat of different seasons. It will likewise be necessary to allow a little latitude in the size of the dressing gauzes, which must be varied to suit the weather and the various other disturbing influences well known to millers. One of the chief features of this invention consists in mixing certain different grades of flour during manufacture, and not in mixing certain definite and fixed proportions thereof. It will be obvious to an experienced miller that one or more of the grades might even be omitted altogether without departing from the principle of my invention.

#### ENGLISH VERSUS FOREIGN MILLERS.

Following is an interesting article contributed by a "Scotch Baker" to the London "British and Foreign Confectioner" on English and foreign millers: There appears to be no reasonable doubt that the number of flour-mills at work in the United Kingdom has, for some years, been declining, but it is not generally known that the quantity of flour manufactured in this country has been as nearly as possible stationary for the past decade, and it is only during the past few months that there has been a tendency towards an increase in the production of flour in the United Kingdom. From the "Trade Items" of an esteemed cotemporary for the past 18 months, it is evident that a considerable amount of money has been spent in remodeling mills and increasing their ca-



capacity, and we should estimate that the capital expended from 1879 to the present time is close upon £8,000,000 in the introduction of improved methods of manufacture. This large expenditure of money in improving the mills and adopting labor-saving appliances has necessarily made a large and striking decrease in the number of flour-mills, as well as the number of operative millers employed. Taking the whole of the United Kingdom, it appears that in the year 1880 there were 10,450 flour-mills at work, while in 1887 that number was reduced to 8,820, and at the present time there are not more than about 8,450, which numbers would include every little wind to water gristing-mill, as well as the pair of millstones used by the farmer who may have them fixed to grind his cattle-food. According to the above figures it is evident that some 2,000 mills have ceased to exist during the past ten years, and it must be borne in mind that during these years roller mills have sprung into existence. It might be of interest at this juncture to mention that, according to the census returns for England and Wales, prior to roller mills, there were for the periods 1851 to 1881 the following number of millers of corn, masters and men together:

1851, Population, 17,927,609 .....	Millers of corn, 36,076
1866 " 20,066,244 .....	" 31,639
1871 " 22,712,266 .....	" 29,720
1881 " 25,974,439 .....	" 23,462

The above table shows that from 1851 to 1881 the population increased 8,046,830, and the number of master and operative millers combined became fewer by 12,614. The population in the United Kingdom in the middle of 1889 was estimated at 37,808,892 persons, 29,015,613 in England and Wales, 4,077,070 in Scotland, and 4,716,209 in Ireland. The number of roller flour-mills now in the United Kingdom is 540, producing over 26,500,000 sacks of flour per annum; but how much flour is produced by the remaining 7,910 millstone mills it is impossible to ascertain. We may, assume that 3,800 of the 7,910 millstone mills do not produce any flour to speak of, but only do gristing work for cattle-feeding. To find out the quantity of flour produced by the millstone mills we must take the old-fashioned way of estimating it, which is, that one person eats a sack of flour of 280 pounds per annum; so, as the population of the United Kingdom is about 36,808,892, the amount of flour consumed by the inhabitants of Great Britain should be 36,808,892, sacks of 280 pounds. If we take from the total number of sacks required the 26,500,000 produced by the roller mills in this country, we have a balance of over 11,000,000 sacks of flour, which are contributed by the millstone millers and the foreigner combined. We know from the imports into the United Kingdom during the past five years that the quantities of flour received from the different countries were as follows:

From—	1886. Cwts.	1887. Cwts.	1888. Cwts.	1889. Cwts.
Germany .....	816,737	588,876	1,109,179	1,155,189
France .....	114,594	97,620	101,864	90,613
Austrian Territories ..	1,362,285	1,390,605	1,946,038	1,838,115
United States .....	11,473,182	14,873,443	12,557,096	10,067,827
British North America	770,530	958,873	785,163	1,168,892
Other Countries .....	201,894	147,128	413,433	378,565
Total in cwts. ....	14,739,232	18,056,545	16,912,773	14,699,201
Total in sacks, 280lbs	5,895,692	7,222,618	6,765,109	5,879,680

So that the millstone mills at work in the United Kingdom supply more flour for bread-making than is imported into this country. When it is taken into account the quantity of flour that is used in other industries besides that required for human food, it is still more surprising that the foreigner does not send over a larger proportion of his manufactured product; but it is a well-known fact that a great quantity of the flour sent from America is not fit to be made into bread, but it is utilized in a number of ways, such, for example as an adulterant for linseed cake for cattle-feeding purposes, when it can be bought for £5 per ton and sold for £7 10s. We are perfectly aware that a large quantity of flour is required for "dressing" purposes, in the manufacture of calicoes and such like cotton goods, but until recently we were not aware that low-grade flours were used in the manufacture of brown paper. When we asked for what purpose

it could be used in a brown-paper mill, we were astonished to hear that it was very useful, when made into "paste," to hold heavy material matter in the brown-paper pulp. It will be seen from the foregoing remarks that the milling industry in this country is not only on the mend, but has never really been seriously threatened by the large imports of American flour.

Commenting on this article, the London "Millers' Gazette" says: The above article sets forth some interesting figures in regard to foreign competition, figures which we have frequently referred to. The writer, however, makes a mistake in supposing that there are only 540 roller mills in the United Kingdom at the present time; there are nearer 750, while the number of flour-mills, of all sorts and sizes, at present working in the kingdom, probably does not exceed 4,000, instead of 8,450 as above stated. It is almost impossible to find the exact figures, but it is probable that roller millers make nearly 30,000,000 sacks per annum, and that stone-made flour does not exceed 5,000,000 sacks.

#### A SHORT FREE TRADE SERMON.

A blue book has just been issued by the British Government dealing with the expenditures of working men in different parts of the country. The classes of workmen included in the returns are various and come from all parts of England and from one or two places in Scotland. Miners, joiners, engineers, shoe-makers, printers, agricultural laborers, clerks, all these groups and others are put under contribution. The total wages vary from \$150 to \$750 per annum, and it is somewhat curious to notice that those of the agricultural laborers, when the full receipts of the year come to be added up, are not the lowest. Thus the yearly incomes of the families of two Kentish laborers given are \$250 and \$210 whereas those of three Northumberland miners are as low as \$145, \$160 and \$165.

#### A NEW METHOD OF TREATING DISEASE.

##### HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage by Hospital Remedy Company, Toronto, Canada, sole proprietors.

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## Practical Notes

**THE COLOR OF PURE WATER.**—The cause of the difference in the color of lakes and rivers has engaged the attention of many celebrated investigators of nature, such as Tyndall, Bunsen, Arago, Sainte-Claire, Deville and others. Recently Prof. Spring, of the University of Liege, has carefully investigated the question of the color of water and has reached some interesting conclusions. According to him, absolutely pure water, when seen in masses of sufficient thickness, is blue, and all the varieties of color exhibited in lakes and streams arise from the presence in the water of mineral salts of different degrees of solubility and in varying quantities. Water containing carbonate of lime in a state of almost complete solution remains blue, but if the solution is less complete the water will have a tinge of green, which will grow stronger as the point of precipitation is approached. Prof. Spring concludes that, if lime is added to blue water, in which so much carbonate of lime is already dissolved that the point of saturation is approached, the water will become green. In proof of this he cites the fact that the water near the shores of lakes and seas, where it comes in contact with limestone, is generally of a greener hue than elsewhere.

## GENERAL NOTES.

The coldest weather ever recorded officially was at Werchojansk, Siberia, Jan. 15, 1885, when the thermometer registered 90.4° below zero; and the warmest was at Onargia, Algeria, July 17, 1879, when the thermometer in the shade showed 127.4°.

### BREADSTUFF EXPORTATION.

Exportations of breadstuffs from the United States during the month of March maintained the gratifying increase inaugurated several months ago. The month's exports of wheat grain footed 4,842,732 bushels, worth \$3,938,939, against 2,840,956 bushels, worth \$2,529,639, in March, 1889. For the nine months ending March 31, 1890, the wheat grain exports were 41,914,197 bushels, worth \$34,546,163, against 36,546,926 bushels, worth \$33,313,190, for the corresponding period a year ago. The wheat-flour exports of March, 1890, were 1,151,287 barrels, worth \$5,339,254, against 669,006 barrels, worth \$3,306,690, in March, 1889. For the nine months ending March, 31 this year the flour exports footed 8,986,246 barrels, worth \$42,364,451, against 6,896,472 barrels, worth \$33,497,226, for the corresponding period a year ago. The value of the wheat grain and flour exported in March this year is \$9,278,193, against \$5,836,329 in March last year. The grain and flour exported during the nine months ending March 31 equaled 82,352,304 bushels of grain, against 67,581,050 bushels for the corresponding period a year ago. The improvement in wheat grain and flour is, therefore, a decidedly healthy one.

The minor lines showed increases in nearly every case. The March barley exports were 115,920 bushels, worth \$55,043, against 26,584 bushels, worth \$14,930, in March, 1889, while the nine-month total is 1,209,714 bushels, worth \$661,958, against 1,337,076 bushels, worth \$811,741. The March corn total is 13,248,292 bushels, worth \$5,341,415, against 8,204,451 bushels, worth \$3,685,663, and the nine-month total is 68,693,070 bushels, worth \$28,904,272, against 46,911,434 bushels, worth \$22,989,317. The nine-month corn-meal total is 266,045 barrels, worth \$671,741, against 232,834 barrels, worth \$662,200. The nine-month oats total is 6,458,266 bushels, worth \$2,019,479, against 490,863 bushels, worth \$197,181. The nine-month oatmeal total is 17,883,991 pounds, worth \$570,238, against 7,281,546 pounds, worth \$201,223. The rye total for nine months is 1,228,823 bushels, worth \$676,165, against 133,786 bushels, worth \$72,869. The March breadstuffs exported were worth \$15,566,219, against \$9,636,482 in

March, 1889. For the three months ending March 31, 1890, the total is \$41,764,017, against \$28,763,471 last year. For the nine months ending March 31, 1890, the total is \$110,414,367, against \$91,744,947 a year ago. When it is remembered that these enormous increases in total values have been achieved in spite of abnormally and unusually depressed values for the whole line of breadstuffs, it will be seen that the American breadstuff exportation interest is healthy and vigorous on the whole. In addition to the above totals, the beef, hog and dairy products exported in March footed \$10,565,563, against \$8,635,391 last year, and for the first three months of 1890 the total is \$32,768,898, against \$27,834,160 last year.

### CHICAGO WHEAT AND PORK GAMBLING.

Millers will be interested in the following description of the doings in the Chicago wheat and pork markets on Saturday, April 12, when there was something like a panic among the "bears" of that city. The account says: This was a day of panic among the shorts. It began in pork, but, like all panics, it spread. The terror among the wheat shorts became even more extreme than that in the pork pit. If the market had lasted another hour the fright would probably have spread to corn. As it was, it lasted long enough and spread far enough to cause an advance of nearly 7 cents in May wheat, to cause an advance of \$4 in pork, of 25 cents per hundred in lard, of 22 cents per hundred in ribs, cause an advance of  $\frac{3}{8}$  of a cent in corn and of  $\frac{1}{2}$  of a cent in oats. Such punishment upon the short seller in so many articles in one day has not been inflicted before in years. Hutchinson was a large buyer of May and June wheat, and he certainly was bent on driving in some of the big shorts. Yet it will pretty certainly turn out that the chief pressure today was a natural one, caused chiefly by the enormous overselling resulting from a six months' trade in a single option, aggregating possibly 100,000,000 bushels, all of it upon the basis of about 3,000,000 bushels of cash grain. May wheat started at 84 $\frac{1}{2}$  cents, sold from 84 $\frac{1}{2}$  up to 91 cents, and closed at 88 $\frac{1}{2}$  cents. June was, most of the day, at a little premium over May, but did not go above 90 cents. There was no such pressure on July as on May, and the fluctuations were moderate. It opened at 83 $\frac{1}{2}$  cents, sold from 83 to 84 $\frac{1}{2}$  cents, and closed at 84 $\frac{1}{2}$  cents.

The first incentive to the market was a natural one, the weather. It was freezing hard all over Dakota. The newspapers contained specials declaring that the newly planted wheat was blown out of the ground, and the signal service bureau was out in a bulletin predicting most unusual storm conditions for certain parts of the West. These reports started wheat strong and kept it moderately active and moderately firm for an hour, possibly. Had there been no unusual occurrence in the provision pit, wheat might have continued all day as it opened, simply a moderately active and a moderately firm market. There had been no unusual fluctuations until after pork had advanced \$4 a barrel, and until after the shorts in hog product had furnished so startling an illustration of the occasional perils of short selling. The illustration certainly had its effect in the wheat pit. It was not instantaneous. But one May short decided to cover, and then another. Within thirty minutes after the race to cover started the whole bear fraternity was in full stampede. It was at this juncture that Hutchinson began to take an important part in the advance. His brokers, Ryder & Morgan, by steady buying really made the market, compelling everybody in the pit desirous of buying May to bid over them to get any stuff. They continued these tactics until May got to 90 cents. By that time the bear panic was so fierce and the calling of margins so sharp that the crowd carried the May price to 91 cents without any aid from Hutchinson. Indeed, the latter from 90 to 91 cents and from that down to 89 cents was a free seller.

Corn, during the greater part of the day, was comparatively dull, within a narrow range. Just before the close the sad experience of the short sellers in wheat and pork was taken to heart by the corn shorts, and there had followed some covering. May opened at 31 $\frac{1}{2}$  cents, sold be-



tween 31½ to 31¾ and 32½ to 32¾, and closed at 32½. Oats, like corn, escaped the excitement of the surrounding pits. But, as was the case with corn, just before the close there appeared a little of that uneasiness which had created such astounding results in wheat and pork. The closing bell sounded just in time for the oats pit to escape it. May started at 23½ and closed at 23¾ cents. July was the same price. The New Yorkers and the Londoners who have been dabbling in pork here, and in this market since last fall, who suffered such a disastrous defeat last October, had their revenge to-day. The buying of pork, which has been going on through all the clique houses all the month, but which has become particularly noticeable this week, resulted to-day in an advance in pork of \$4 a barrel. May opened at \$11.55, sold up to \$15.50 and closed at \$13.20. July was all day 20 cents premium over May. The buying orders in pork have all along come from Sawyer, Wallace & Co., of New York,

and have been executed chiefly by Hutchinson and by W. G. McCormick. Hutchinson had the most of the buying orders to-day. These were evidently unlimited as to the price, the purpose plainly being to advance the figures so fast and so far as to make it absolutely impossible for an ordinary short to stand out and to keep putting up margins. Hutchinson's men, in bidding for May pork, ignored the factions. If they could not get an offer at one figure they immediately advanced their bid 25 cents. The price advanced about \$1 a barrel in the first hour, and \$3 a barrel more in the next thirty minutes. At once there were margin calls of \$5 a barrel flying around. The gossip was that one short came in on 30,000 barrels. The extraordinary "action" at once gave rise to the inevitable gossip about an Armour corner. As good a judge, however, as Ream, gave it as his opinion that the squeeze was as much natural as artificial.

**PREJUDICE** Investigate the merits of the Reliance Safety Water Columns. It pays to keep posted. Many of the largest corporations have found it profitable to discard the old appliances and adopt these safeguards. There is always economy in safety. Send for illustrated price-list.

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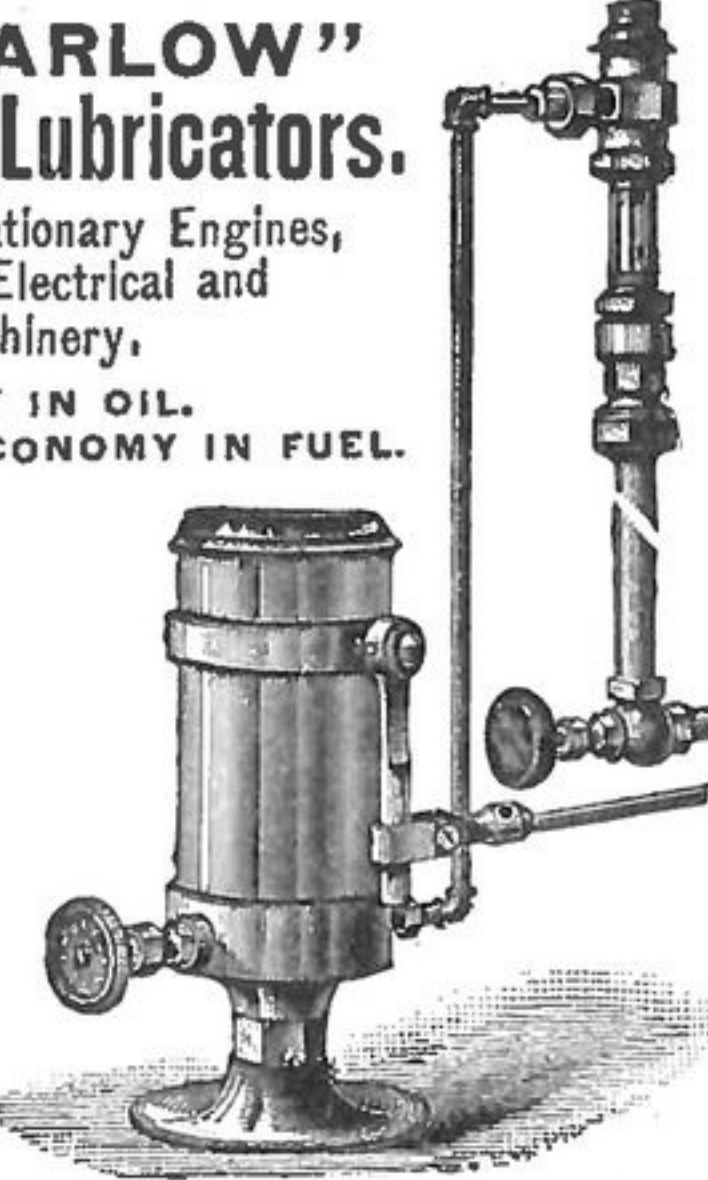
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BEING operated by some moving portion of the engine or machine to be lubricated, the "Harlow Lubricator" starts and stops with the engine or machine being lubricated, without requiring the slightest attention from the engineer or operator, always delivering the oil in any amount from a drop to a constant stream. The cup can be filled at any moment while the engine or machine being lubricated is in operation, without causing any leakage either of oil or steam.

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These Catechisms give plain, correct, practical answers to practical questions, such as would be asked candidates for positions, licenses, or admission to engineering societies. No high science; no mathematical gymnastics. Popular style. Up to date.

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 A very common-sense book for everybody.

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 Helps you to learn or remember how to take the square root of anything.

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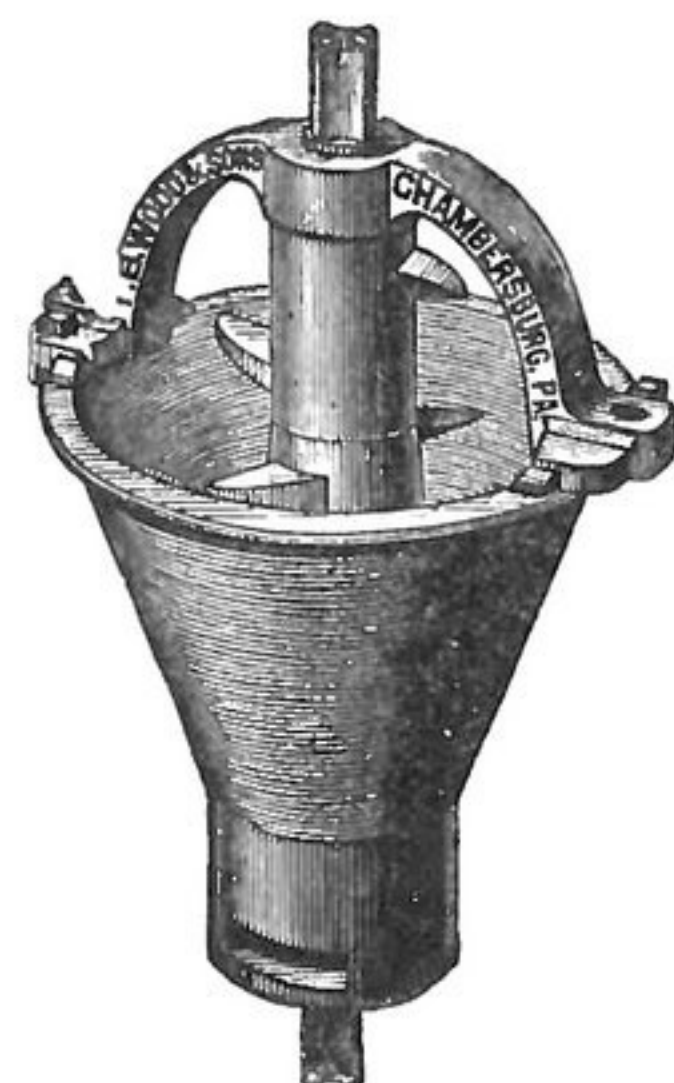
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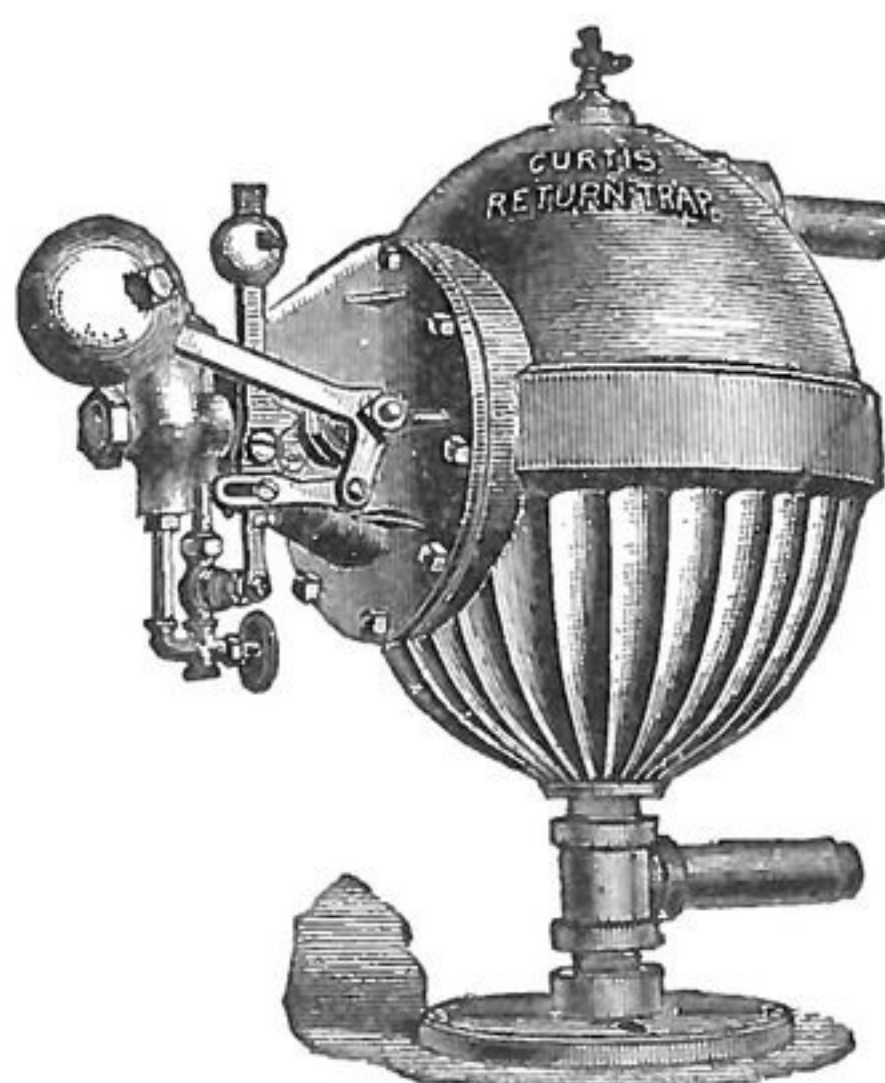
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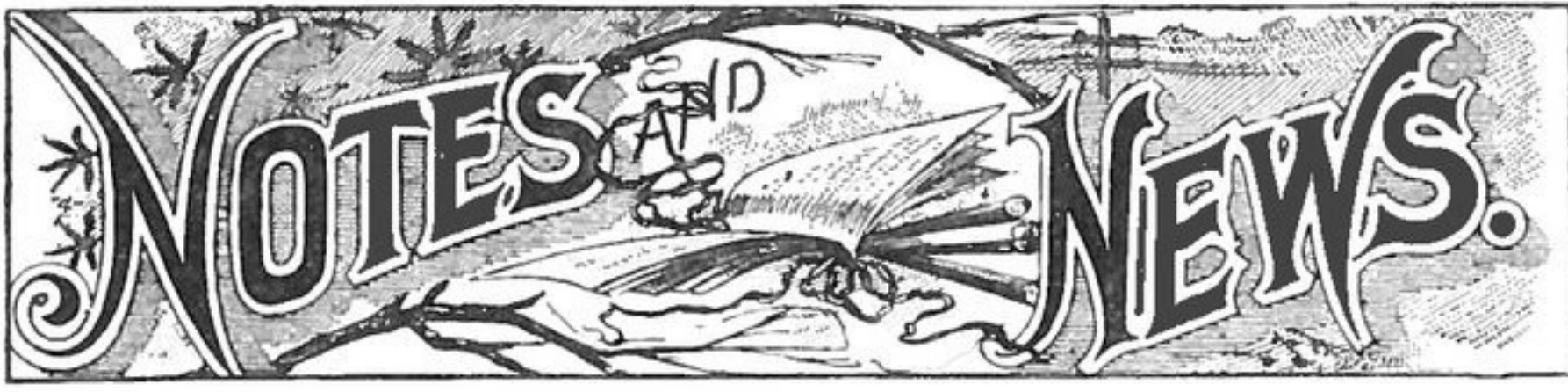
It is noiseless, positive, rapid, will return all condensation back into the boiler, and works equally well in connection with reduced pressure or exhaust steam, also when the return is below the water line of the boiler.

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GENERAL AGENCIES.

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Rhome, Tex., men build a flour-mill.  
 I. S. Morrill's flour-mill, Bethel, Me., burned.  
 The Richmond grist-mill, Guilford, Vt., burned.  
 The Acme Milling Co., Cincinnati, O., quit business.  
 E. Wheeler's grist-mill, St. Albans, W. Va., exploded.  
 A. J. Wilson, Peyton, Ga., wants grist-mill machinery.  
 B. F. McGrew, Pulaski, Tenn., wants flour-mill machinery.  
 J. C. Fredlock & Co., Piedmont, W. Va., enlarge flour-mill.  
 L. F. Ross, Greensboro, N. C., adds new flouring machines.  
 Knapp, Stout & Co.'s elevator, Menomonee, Wis., collapsed.  
 Clark & Brown, millers, Williamsburg, Pa., now E. T. Clark.  
 Bennett, Son & Summery's flour-mill, Papinsville, Mo., burned.  
 Wilson & Rowe's flour-mill, Indiana, Pa., was destroyed by lightning.  
 Minnick & Strouse, millers, Huntington, Ind., dissolve, Strouse retiring.  
 R. J. Willard, flour-mill, Ontario, Ind., succeeded by Willard & Sherman.  
 The old Davidson elevator, St. Paul, Minn., burned; loss \$13,000; partially insured.  
 J. B. Lanier, Salisbury, N. C., wants machinery for a 50 by 100-foot roller flour-mill.  
 John W. Loweth's flouring-mill, Corydon, Ind., burned; loss \$12,000; insurance \$6,000.  
 Spangler & Co., Vernon, Tex., want machinery for a new flour-mill and grain-elevator.  
 The old flour-mill on Hickory Creek, near Joliet, Ill., burned; loss \$8,000; insurance \$2,500.  
 Thomas Hawkshaw, of Fox & Hawkshaw, grist-millers, Lucan, Ontario, Canada, is dead.  
 G. M. Hoover's Sunset Flouring Mills, Dodge City, Kan., burned; loss \$25,000; no insurance.  
 Pickens & Loos' elevator, Deacon, Neb., burned; loss \$3,000; partial insurance; fire mysterious.  
 The Knox County Union Roller Mill Co., Ebenezer, Tenn., want machinery for a 60-barrel roller flouring-mill.  
 The Richey Milling Co.'s flouring-mill and grain-elevator, Richey, Mo., burned; loss \$55,000; insurance \$30,000.  
 Boyd Bros., Irvington, Ga., want machinery for a new mill, to grind 75 barrels of flour and 300 bushels of corn daily.  
 Calvin Deal and W. A. Lutz, Enochville, N. C., who bought the Stirewalt flour-mill, project a stock company to operate the improved plant.  
 R. D. Gillenwaters and others, Vernon, Tex., are the incorporators of the Vernon Mill & Elevator Co. They want machinery for a new mill and elevator.  
 E. W. Taylor, Fort Worth, Tex., and others have incorporated at Wichita Falls, Tex., the Panhandle Milling & Elevator Co., to build a 500-barrel flouring mill and a 300,000-bushel grain-elevator. Machinery is wanted.  
 The Erie Basin Elevator, Buffalo, N. Y., has been sold by J. Langdon & Co. and the Hamilton estate of Syracuse to C. A. Sweet, C. G. Curtis, George B. Mathews and John Satterfield. It is one of the older elevators in the harbor, and is now somewhat old-fashioned, but it has a capacity of 250,000 bushels and will amply repay repairing. For some time it has not been used. The property independent of the elevator is valuable, as it has 270 feet frontage on the Erie Basin. The price has not been made public.  
 The National Pulley Covering Co., of Baltimore, Md., have recently made arrangements with Messrs. French & Linforth, 35 Beale street, San

Francisco, Cal., whereby a stock of their goods will be carried by them. To them all inquiries from the Pacific Coast should be addressed. The March business of this company came from 24 States, among the number being their seventh order from H. Walker & Sons, Walkerville, Canada, and their third from Buffat & Sons, Knoxville, Tenn.

Says the Winnipeg, Manitoba, *Commercial* of April 7: The first seeding done in Manitoba was reported toward the close of last week, but only a very little work was done in this direction. The weather up to the close of the week was favorable, and the snow was going off rapidly. In the southwestern portion of Manitoba the ground is now bare. In the eastern and northern sections there was considerable snow yet on Saturday, but a very short time will remove with weather like the present. Seeding is more than a month later than last year. More seeding was done during the first week of March last year than has been done during the first week of April this year. The general opinion is that the conditions are more favorable this year.

United States Consul E. L. Baker, at Buenos Ayres, writes that "the agricultural department of the Argentine Republic has never interested itself enough in such matters even to know the actual breadth of land in cereal crops, or the amount of the average crops raised. Even the amount required for the home demand is quite a matter of guess-work, and about all that is known in reference to a crop is learned from the amount which is exported." At the time of Consul Baker's writing the prices of wheat at Buenos Ayres were from \$10 to \$12 currency per 100 kilograms, that is to say, about \$5 to \$6 gold per 220 pounds, while flour is from \$1.50 to \$2.20 currency per 10 kilograms, from 70 cents to \$1 gold for 20 pounds. The chances of a very large exportation of wheat from a country where it is worth 80 cents a peck to a country that pays 90 cents a bushel are slim. Consul Baker thinks the breadth of land devoted to wheat is larger than it was last year, as about 50,000 farmers settled in the Republic during 1889.

#### OH, WHITHER SO HIGH?

"Old Hutch, Old Hutch, oh, whither so high?"

"To gather the treasures of the sky.

I've cornered the earth, and I want the moon.

Oh, I'll come down again very soon."

Chicago "Times."

And when you come down again, Hutch, Old Hutch,  
 All trimmed with feathers, and wings, and such,  
 Just flop on Chicago with fire and blade,  
 And mop up the lake with her Board of Trade!

#### BOOKS AND PAMPHLETS.

That wonderfully valuable periodical *Triffet's Monthly Galaxy of Music*, published at \$1 a year, by F. Triffet, 408 Washington st., Boston, Mass., contains in the April number \$4.70 worth of vocal and instrumental music of a high grade of merit, all of which may be had for a dime. Address the publisher.

It would seem that *The Transatlantic* must win the support of the musical public all over the country, judging by the succession of attractions which it has offered to that class of readers. In its issue of April 15 it adds another to its brilliant strokes in this line by giving a selection from Camille Saint-Saens' new opera, "Ascanio," as well as a fine half-tone portrait of the composer, accompanied by a personal sketch, delightful extracts from his letters, a synopsis of his libretto, and analytical estimates of his works by the best French critics. Another attraction of the number is a collection of brilliant articles from the European press on Bismarck and the significance of his retirement. A very clever and startling piece of work is the sequel to Walter Besant's sequel to Henrik Ibsen's "Doll's House," from the pen of G. Bernard Shaw, which stands instead of *The Transatlantic's* usual novelette. An article by Max Mueller on "Thought and Breathing," which will interest the Theosophists and mystics, and a poem, "O Lovely Child," rendered from the German of Paul Heyse, are prominent among numerous other interesting features.



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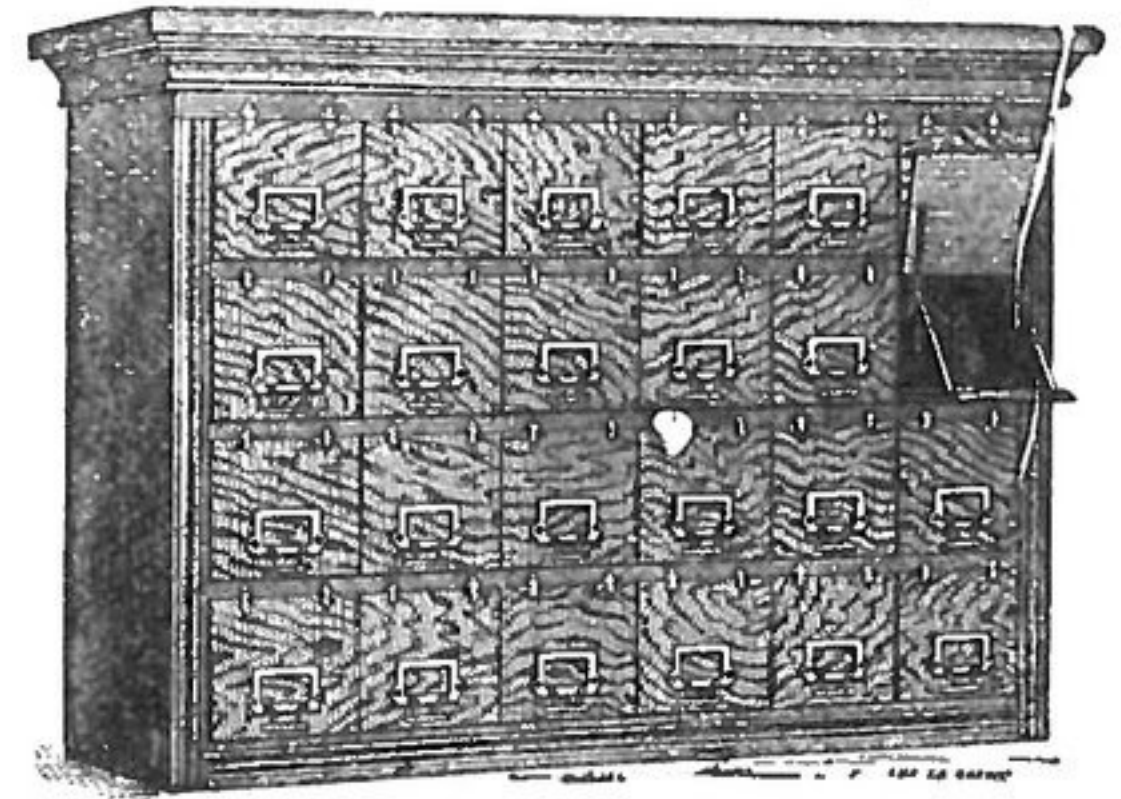
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**NO. 8** Represents one side of one of our Revolving Cabinet Letter Files and Document Cases Combined. It contains 30 Document Drawers and 8 Letter File Drawers. In filing letters we use first VOWEL of name on front of drawer, and LETTER FOLLOWING first VOWEL on Index Sheet within drawer. We also make more exhaustive systems which contain from 6 to 100 or more Filing Drawers.

**NO. 1** Represents one of our small Document Cabinets, for use on desks or brackets. Action of drawer can be seen in the cut. When front is raised inner drawer comes forward, exposing contents of drawer for inspection.

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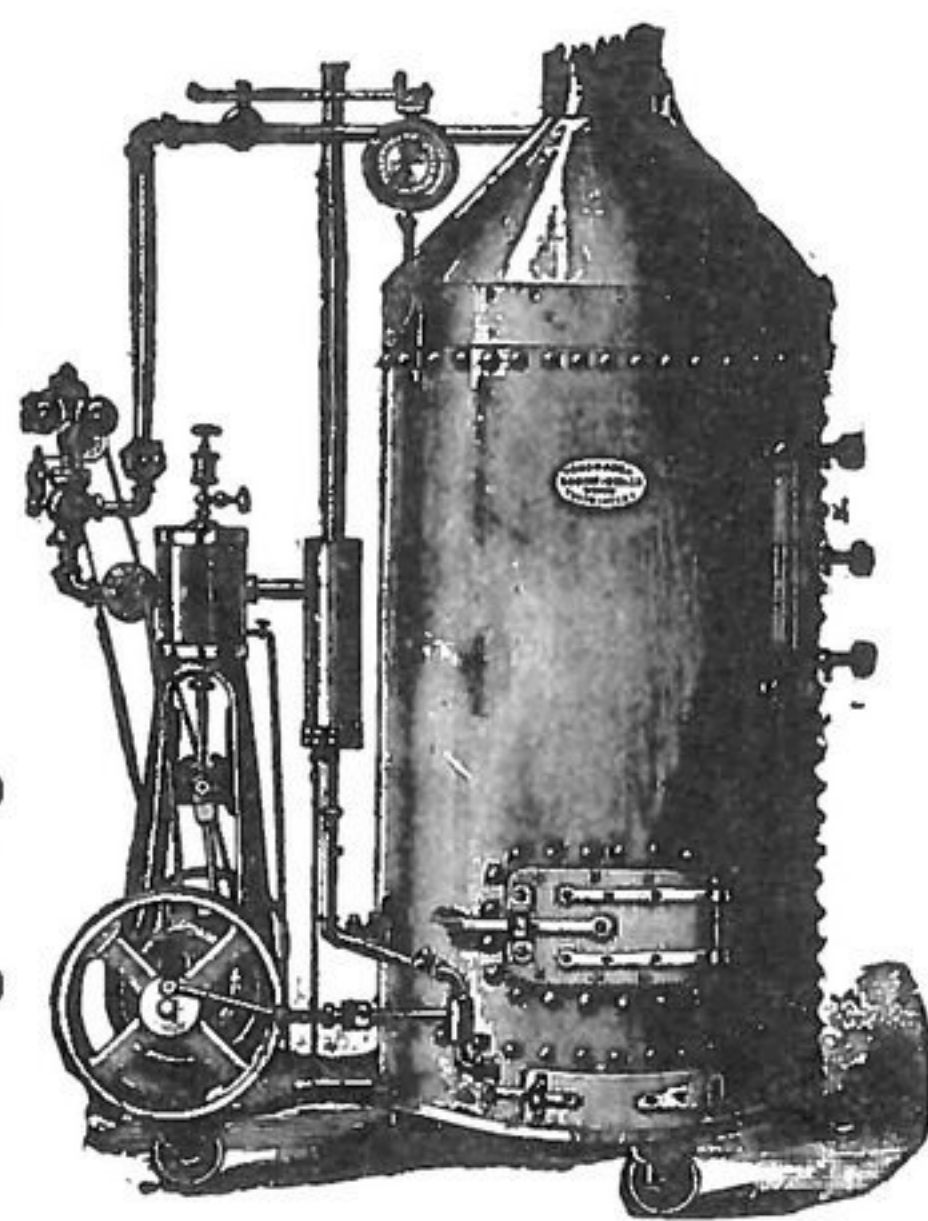


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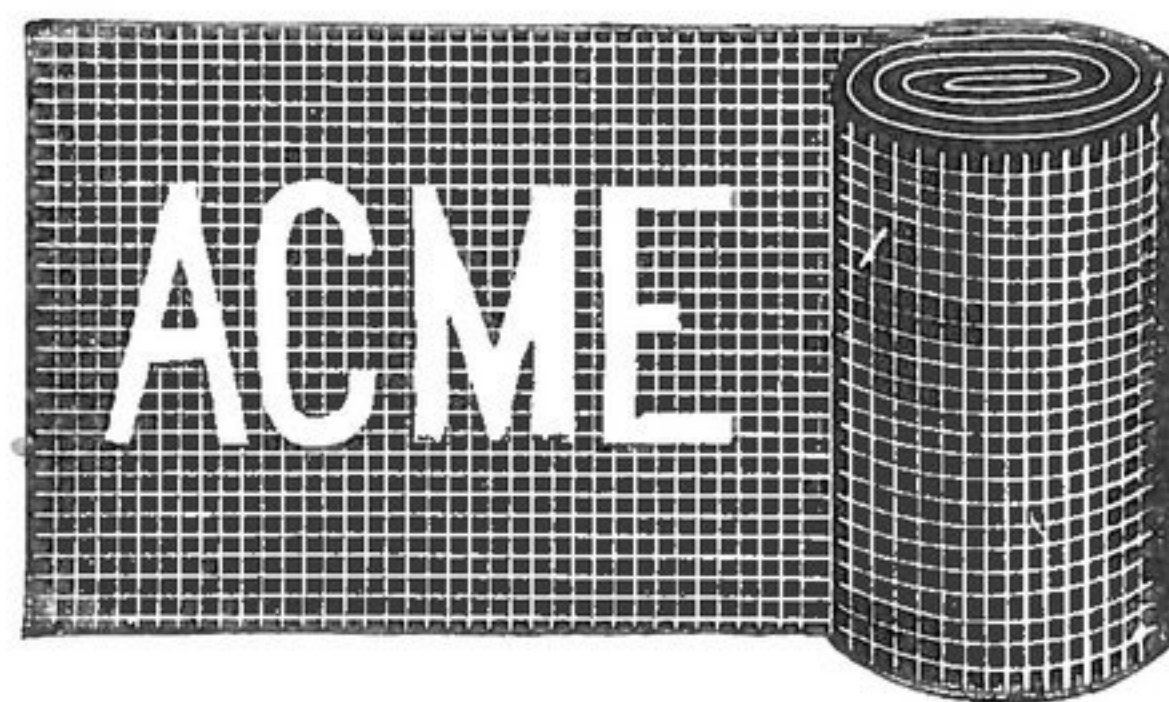


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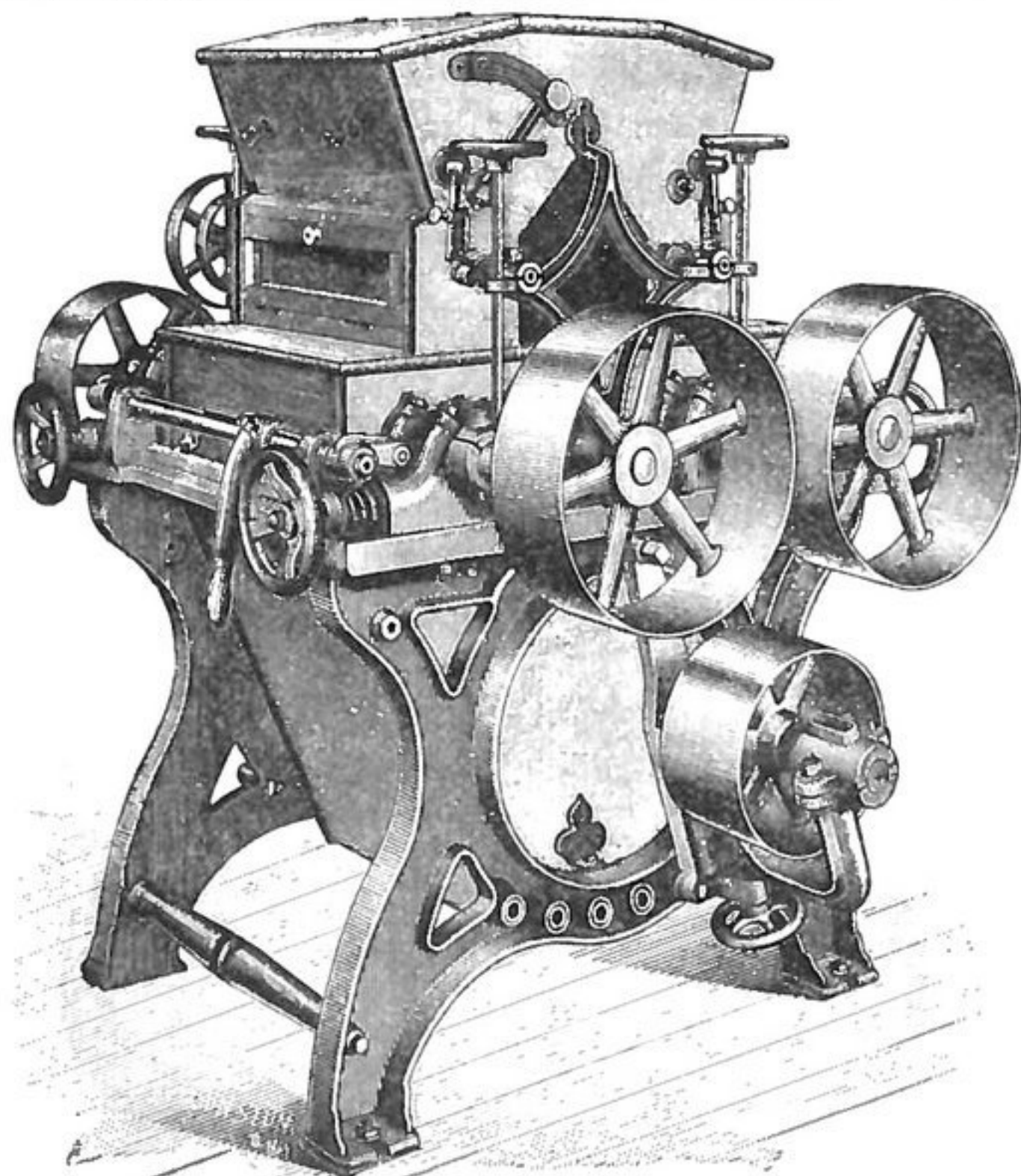
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## EUROPEAN ECHOES.

SAYS the London "Millers' Gazette" of April 5: Stocks of foreign flour in the various ports of the United Kingdom are not far short of 1,000,000 sacks, and is perhaps the largest on record. This arises, perhaps, as much from the fact that foreign flour has been unusually slow to sell this season, as from the circumstance that the imports in the United Kingdom have been very large during the past three months. London, of course, holds the lion's share, 425,000 sacks, Glasgow coming next with 214,000 sacks, and Liverpool third with 149,420 sacks. At the same time last year the stock in the principal ports was only 685,443 sacks; in 1888 it was 950,000 sacks; and in 1887 it amounted to 850,000 sacks. It is a noteworthy fact that in thirteen of the principal ports of the kingdom the stock of foreign flour is as large as that of wheat, the latter being unusually small, especially in London.

THE following table, compiled from statistics supplied to the British Foreign office by E. F. Law, the commercial attache of the British Embassy in St. Petersburg, shows the total exports, in poods of 36 pounds, of grain from Russia during the last three years:

	1887. Poods.	1888. Poods.	1889. Poods.
Wheat.....	130,618,942	211,744,195	161,365,563
Rye.....	77,552,728	105,961,269	71,797,932
Oats.....	61,015,955	87,889,949	68,859,853
Barley.....	58,541,315	79,296,187	48,712,039
Maize.....	29,760,985	16,894,884	18,975,099

It may be pointed out that, though the wheat exports last year showed a very marked falling off against the preceding year, the total was far above the average. The nearest approach in any one year was in 1885, when the figures were 154,058,083 poods. It must be borne in mind that the grain exported consisted largely of the production of the previous years. The Russian crops were very abundant in 1887 and 1888, and hence the large exports in 1888 and 1889. The harvests were last year very poor in most parts of the country, and therefore a considerable falling off in the figures for the current year may be expected.

### MILLING PATENTS.

Among the patents granted April 15, 1890, are the following:

Wm. S. Mallard, Darien, Ga., No. 425,683, a rice huller and polisher.

Horace Foster, sr., Knoxville, Tenn., and Benjamin Fairchild, Washington, D. C., No. 425,772, a combined flour safe and sifter.

### THE TRI-STATE MILLERS' MEETING.

Following is an address sent out to the flour-millers of Indiana, Ohio and Michigan: The good people of the city of Fort Wayne, Ind., through their Mayor and Council and Business Mens' Exchange, have extended a cordial invitation to the millers of Indiana, Ohio and Michigan, and all others, to accept their hospitalities on the occasion of the annual convention of the Indiana Millers' Association, which has been appointed to assemble in that city on Tuesday, May 13, 1890. In due time an official call will be issued by the secretaries of the state associations of Indiana, Ohio and Michigan, and also by the secretary of the Millers' National Association, which latter organization will, through its officers and executive board and invited members, participate in the exercises of this tri-state convention. The millers of the three states named have interests in common, and the main purpose of this convention is to devise and discuss measures with a view to decide upon a general plan under which the inequalities and loose practices, at present so inimical to successful milling, may be overcome. The way out of difficulty lies in concerted action. To understand one another's needs millers must come together and, in a spirit of common respect for the personal rights and opinions of their neighbors, fairly and dispassionately act on measures for the good of all. There is in preparation a programme of exercises for the convention. Local committees have been appointed to take charge of the reception and entertainment

of the visitors. Reduced railway rates have been asked for and will no doubt be granted. Hotel fares will not be increased. Appended is the formal invitation of the city authorities and the business men of Fort Wayne:

FORT WAYNE, IND., Feb. 28, 1890.

The Business Mens' Exchange heartily invites the State Millers' Association of Indiana to our growing and prosperous city, and will guarantee them a warm welcome and a pleasant time.

JOHN B. MONNING, Pres't.

A. J. MOYNIHAN, Sec'y.

Whereas, The Millers' Associations of Indiana, Ohio and Michigan have been invited by the Northern Association of Indiana to hold their convention in this city, in May, 1890, and Whereas, They are only waiting for a formal invitation from the city authorities to accept the same, therefore, be it Resolved, That this Council extend an invitation to the millers of Ohio, Indiana and Michigan to hold their convention in our city in May, 1890. Be it further Resolved, That a copy of this resolution, signed by the Mayor and Clerk, with the seal of the city attached, be furnished Mr. John B. Monning for transmission to the secretary of said Association.

GEO. W. ELY.

The above resolution was adopted unanimously at a regular meeting of the City Council of Fort Wayne, Ind., held Feb. 25, 1890, and we certify that this is a full, true and correct copy thereof.

DAVID L. HARDING, Mayor.

RUDY C. REINWALD, City Clerk.

Make it a point to attend this meeting. It will pay you in many ways.

D. H. RANCK, Secretary.

S. B. BOYER, President Indiana Millers' Association.

Following is an article on the subject from the Fort Wayne "Gazette" of April 10: The Business Mens' Exchange made preliminary arrangements last night for a suitable entertainment for the 400 or 500 millers, who are expected to attend the millers' convention May 13 next, in Fort Wayne. The Exchange will be in charge of the entertainment and the millers of Indiana, Michigan, Ohio and Illinois will attend. The attractions of Fort Wayne will be shown to the visitors, many of whom will be here on their first visit and do not know how much of a town is located at the confluence of St. Mary's and St. Joseph rivers. A banquet will be given and a carriage ride. President Monning presided and the meeting appointed the following: Committee on finance: John B. Monning, chairman; Perry A. Randall, John B. Reuss, D. N. Foster, Louis Diether, Fred C. Boltz. Committee on arrangements: Edward Orff, chairman; S. M. Foster, A. S. Lauferty, Charles Haiber, Henry Pfeiffer, Charles F. Bash, O. W. Tresselt, Perry A. Randall, H. D. Winch, William M. McKinnie, Chris Entemann, Charles F. Muhler, Louis A. Centilivre, Herman J. Berghoff and John C. Peters. It is expected that when these committees meet they will prepare a programme that will reflect credit on Fort Wayne. Elegantly printed invitations are to be sent out to the millers throughout the four aforementioned states.

There is an even greater variety than usual of interesting matter in *Good Housekeeping* for April 12, in which the Easter element is strong, as the season would naturally require. There are no less than four beautiful Easter poems, "Something about Eggs," and "An Easter Breakfast" for table suggestions, while in "Easter Ministries" Olive E. Dana suggests Christian kindness and helpfulness which should be confined to no time or season. There is an interesting sketch of "Soros," the model woman's club, and many valuable papers relating to the different interests of the household; while nothing will attract more general attention than Helen Campbell's department, which treats of "Woman's Work and Wages." Published by Clark W. Bryan & Co., Springfield, Mass.

### CATARRH.

CATARRHAL DEAFNESS—HAY FEVER.

A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King street, Toronto, Canada.—*Christian Advocate*.

Sufferers from Catarrhal troubles should carefully read the above.



**COMPOUND** Condensing or Non-Condensing.  
16 SIZES, 5 to 500 H. P.  
Not yet equaled by any form of Engine for  
**HIGH FUEL DUTY AND SIMPLICITY.**

**STANDARD** 13 Sizes in Stock.  
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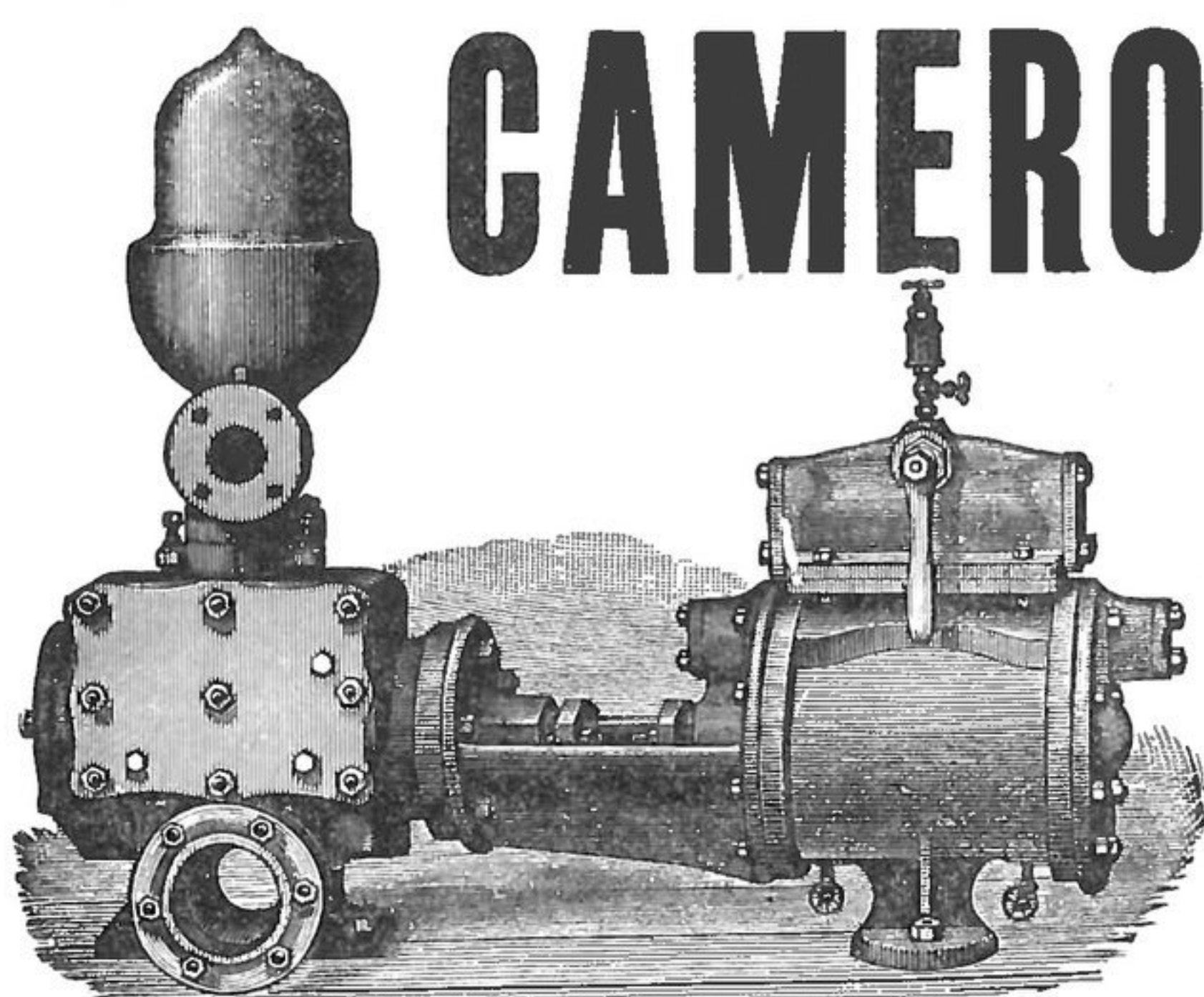
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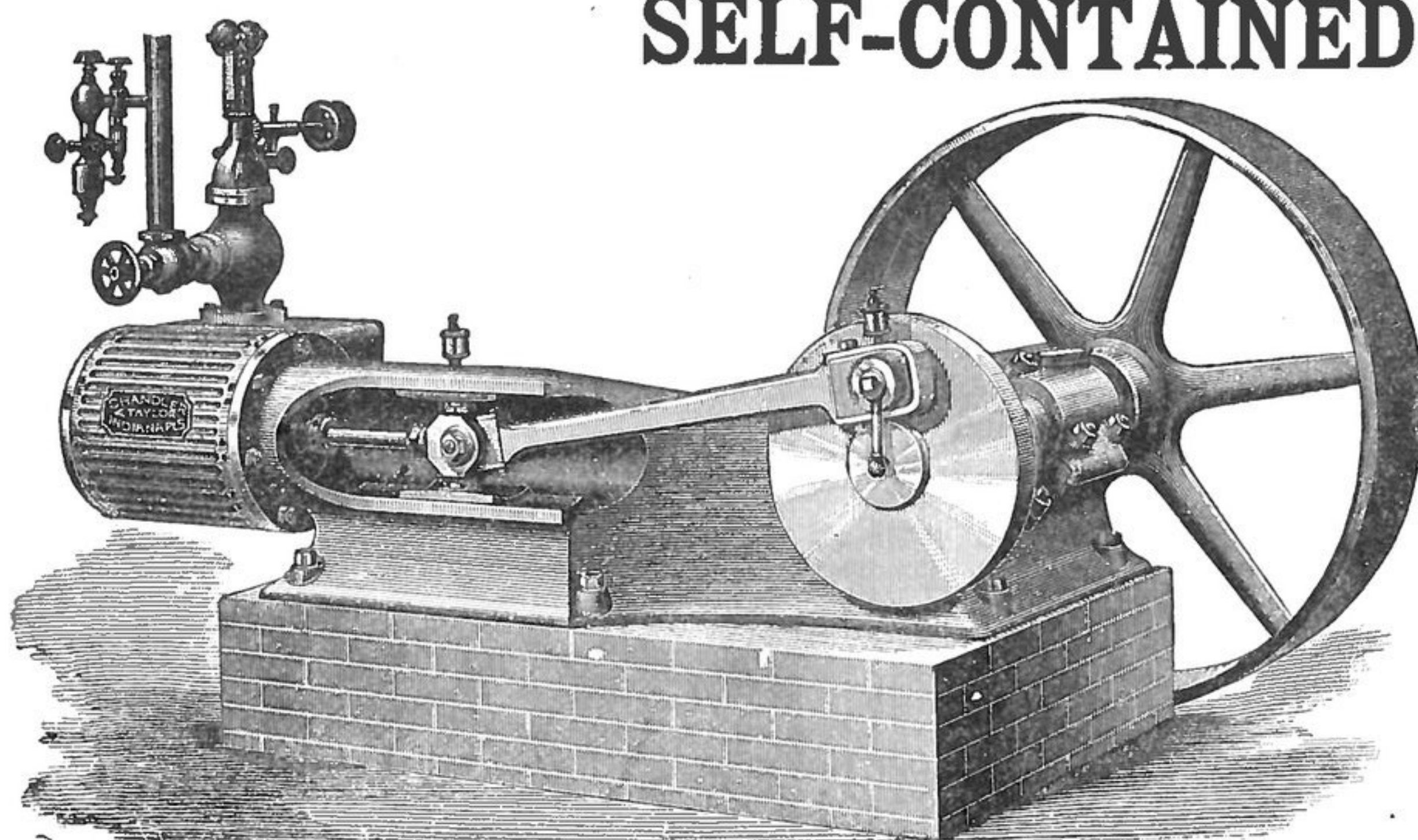
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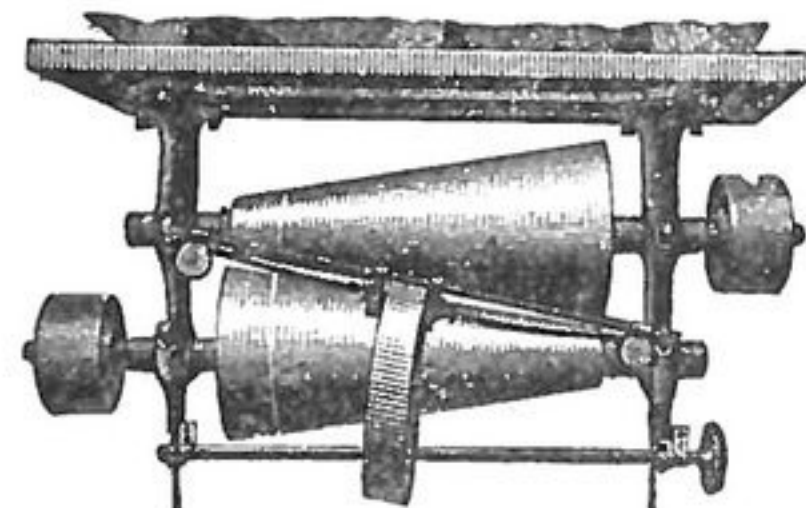
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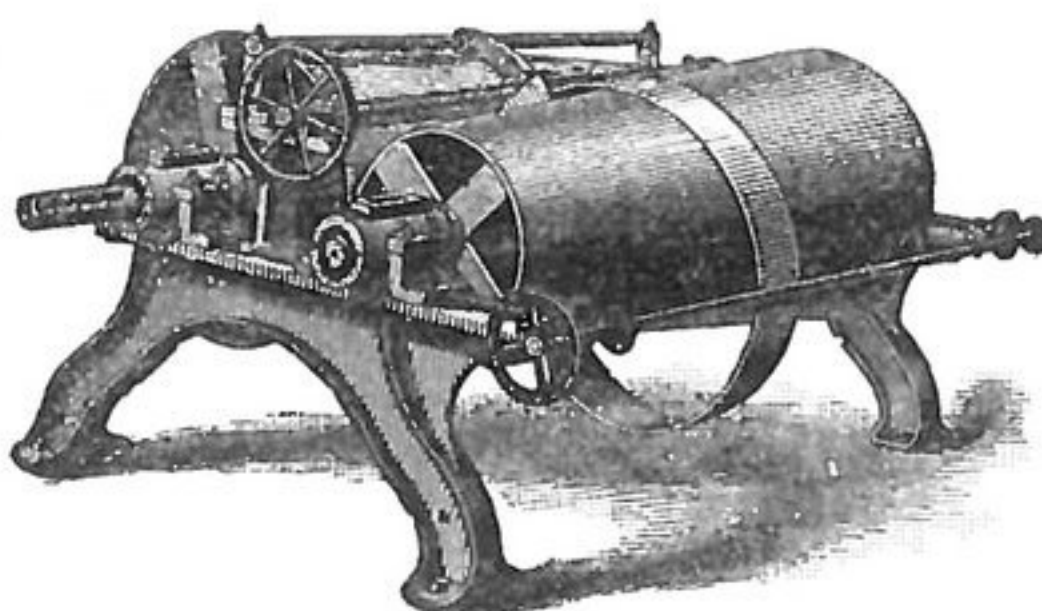
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OFFICE OF THE MILLING WORLD,  
BUFFALO, N. Y., April 19, 1890.

Friday of last week was a day of higher, active and excited markets generally. The New York market beat the record on wheat, scoring a total option sale of 30,250,000 bushels. In New York April wheat closed at 91½c., and May at the same figure. Receipts were 12,439, and exports 19,388 bushels. April corn closed at 39½c., with receipts 456,292, exports 562,308, and options 1,100,000 bushels. April oats closed at 29½c., with receipts 105,726, exports 132,886, and options 250,000 bushels. Wheat flour was less active, but millers' limits were raised 10@15c. all around, checking trade. Receipts were 8,020 sacks and 12,801 barrels, and exports 3,206 sacks and 5,976 barrels. The minor lines were all stronger.

Saturday brought higher, wilder and more irregular markets. The shorts were stampeded, and in Chicago the excitement was wonderful, with May and June wheat closing in that market at 88½c., and July at 84½c. In New York April wheat closed at 91c., and May at the same figure, with receipts 12,638, exports 111,016, and options 12,000,000 bushels for the half-day. At one time during the day May wheat jumped to 93c. in New York. April corn closed at 39½c., with receipts 338,808, exports 541,198, and options 896,000 bushels. April oats closed at 30c., with receipts 100,023, exports 66,959, and options 330,000 bushels. Wheat flour was firmly held on the 10@15c. advance of Friday. Receipts were 8,211 sacks and 20,050 barrels, and exports 15,512 sacks and 3,641 barrels. The minor lines were all firm and stronger.

Monday was the wildest day ever known in the New York wheat market, and all the other markets were higher. It was a day of judgment for the bears. All the shorts were simply panic-stricken. The bulls were on top. April wheat closed at 94½c. in New York, and May at 90c. in Chicago. The day was one of business madness. The New York option sales of wheat, including the Call, amounted to 45,000,000 bushels, breaking all former single-day records in that market. Receipts were only 14,151, and exports 100,000 bushels at Atlantic ports. April corn closed at 40½c., with receipts 344,700, exports 529,567, and options 3,000,000 bushels. Exporters bought freely all day, but it did not appear whether they were buying to fill new orders or to fill short sales on the other side. April oats closed at 30½c., with receipts 86,747, exports 36,026, and options 400,000 bushels. Wheat flour was excited and opened 10@25c. higher on advanced millers' limits, on both spring and winter, on every grade, in sympathy with wheat. The cables did not respond, and the shippers were left high and dry, with trade impossible. Home trade was confined to necessities in every case. The receipts 11,310 sacks and 27,340 barrels, and exports 12,487 sacks and 3,633 barrels. All the minor lines were higher and firmer. The visible supply in the United States and Canada was:

	1890. April 12.	1889. April 13.	1888. April 14.
Wheat.....	26,148,639	27,778,722	32,979,657
Corn.....	20,525,781	16,245,187	8,323,546
Oats.....	4,488,850	6,858,290	3,457,989
Rye.....	1,340,816	1,548,958	323,880
Barley.....	1,052,602	1,052,713	1,346,873

Tuesday brought a partial reaction. The markets generally settled down to more nearly normal conditions. April wheat in New York closed at 92½c., with receipts 39,000, exports 72,939, and options 11,400,000 bushels. May wheat closed at 92½c., and June at 91½c. April corn closed at 39½c., with receipts 324,320, exports 511,595, and options 1,880,000 bushels. April oats closed at 30½c., with receipts 121,185, exports 72,579, and options 325,000 bushels.

Wheat flour was firmly held at the advance on absolute millers' limits, while buyers were holding off and disposing of the stocks bought at lower prices before the flurry. Receipts were 6,042 sacks and 25,475 barrels, and exports 21,711 sacks and 0,592 barrels. The minor lines continued firm.

The following shows the amount of wheat and flour together with the amount of corn on passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

	1890. April 15.	1889. April 16.
Wheat and flour, qrs....	2,669,000	1,945,000
Corn, qrs.....	564,000	349,000

The following shows the amount of wheat and corn on passage to the Continent for the past week and for the same week last year:

	1890. April 15.	1889. April 16.
Wheat, qrs.....	660,000	360,000
Corn, qrs.....	610,000	201,000

	Qrs.
Shipments India wheat to U. K.....	5,000
do do Continent..	None.

The imports into the United Kingdom for the past week, the previous week and for the same week in previous year were as follows:

	1890. April 15.	1890. April 8.	1889. April 16.
Wheat, qrs.....	292,000	182,000	202,000
Corn, qrs.....	251,000	206,000	176,000
Flour, bbls.....	275,000	106,000	189,000

Wednesday brought greater strength in the wheat market, on renewed bad crop reports from the winter-wheat region, as well as from some portions of the spring-wheat regions. With the greater strength there was less activity. April wheat closed in New York at 93½c., with receipts 21,114, exports 21,877, and options 8,760,000 bushels. The fear of Chicago manipulation checked activity. April corn closed at 40½c., with receipts 335,807, exports 207,182, and options 1,520,000 bushels. April oats closed at 30½c., with receipts 32,771, exports 173,978, and options 400,000 bushels. Wheat flour was strong at the late full advanced demands on all grades, but both buyers and sellers were holding off. Buyers were offering half the advance, and pretending to look for a severe reaction, while holders expressed their confidence that flour will hold higher and stronger for the remainder of the crop year. Receipts included 7,512 sacks and 21,746 barrels, and exports 14,568 sacks and 6,834 barrels. The minor lines were unchanged and generally strong.

Thursday brought a partial renewal of the activity and excitement of the earlier days of the week. April wheat closed at 93½c., with receipts 17,400, exports 32,977, spot sales 163,000, and options 15,960,000 bushels. April corn closed at 40½c., with receipts 7,150, exports 17,520, spot sales 174,000, and options 1,480,000 bushels. April oats closed at 31½c., with receipts 76,000, spot sales 181,000, and options 585,000 bushels. Rye grain was strong and quiet at 58½@59½c. Barley was strong at 55@58c. for State, 46@62c. for Western, and 69@75c. for Canadian. Barley malt was strong at 62½@72½c. for 2-rowed State, 72½@85c. for 6-rowed State, and 75@90c. for Canada.

Wheat flour was held firmly and was moderately active. Receipts were 18,800 packages, and sales 22,500 barrels. Sales were made at the following figures: Low extras \$2.35@2.85; city mills \$4.30@4.50; city mills patents \$4.90@5.50; winter wheat low grades \$2.35@2.85; fair to fancy \$3.00@4.65; patents \$4.50@5.25; Minnesota clear \$3.50@4.35; Minnesota straights \$3.90@4.85; Minnesota patents \$4.65@5.50; Minnesota rye mixtures \$3.65@4.15; superfine \$2.15@2.60. Rye flour was strong at \$2.90@3.35. Corn-meal was quiet at \$2.10@2.45. The feed market was steady, with bran at 72½@77½c., middlings at 87½@91½c., and rye feed at 72½@75c.

The Minneapolis output of flour the past week was 114,100, by 11 mills. This week 13 mills in that town were running, and they have been turning out 20,000 barrels daily.

THE amount of malt liquors consumed in 1889 was 767,587,056 gallons. This includes not quite 3,000,000 gallons of imported beer and ale. The manufacturers' price to the retailer is rather above than below 20 cents per gallon. At 20 cents the cost to the dealer would be \$153,517,411. The retailers get an average of 60 cents per gallon, which makes the cost to the consumers \$460,522,233, which the American people spend annually for malt liquor, principally beer. The most careful estimate puts the cost of wine to the consumer at \$72,670,136, and of distilled spirits \$379,226,860. This gives a grand total of \$912,449,129, nearly \$1,000,000,000 spent annually for liquor by the people of the United States.

A CHICAGO computation estimates the government report on winter wheat as pointing to a production of 305,587,000 bushels, compared with 332,243,000 harvested last year.

POTATO rot is caused by the working of a minute insect. Pasteur, the eminent French chemist, recently examined a piece of this rot the size of a pin's head, and found in it over 200 minute forms of animal life, living a regular cat-and-dog life, continually biting and clawing at each other.

A MONROE, Mich., correspondent writes: "A large acreage of Scotch Fife Spring wheat has been sown here this year. It has been raised here for the past three years, and has uniformly done remarkably well. It has yielded on an average about 24 to 40 bushels of No. 1 hard wheat per acre, something unusual for this section."

#### BUFFALO MARKETS.

WHEAT—The irregularity of the markets in New York and Chicago prevented trading here in a great measure. Some 8,000 bushels of No. 1 hard, and 8,000 of No. 1 Northern were sold c. i. f. at p. n. t. No. 2 red winter is quoted at 92@93c. and spot is held at 94c. No. 1 white c. i. f. is held at 91c. No. 2 extra white, on track, 92c.; No. 2 white 90c. CORN—The market was easier to-day. No. 2 yellow in store, sold at 38c. No. 3 do on track at 37½c.; choice No. 3 do brought 38c. and No. 4 do 37½c. No. 2 corn in the elevator sold at 37c., and No. 3 corn in store brought 36½c. OATS—The market is firm; No. 2 white, to arrive, old at 31½c., do on track at 31½@32c. and No. 3 white brought 30½c. No. 2 mixed was sold at 29½c. RYE—Quotations remain at 50c. for No. 2, but few sales are made. BARLEY—No. 1 Canada is quoted at 67@69c., No. 2 at 65@66c. OATMEAL—Akron, \$5.45; Western, \$5.25 per bbl.; rolled oats, in cases, 72 lbs., \$3.25. CORNMEAL—Coarse, 75@85c.; fine, 80@90c.; granulated, \$1.50 per cwt. MILLFEED—City-ground coarse winter, \$14.50@15.00 per ton; finedo. \$14.50@15.50; finished winter middlings, \$15.00@16.00; coarse spring do, \$13.00@13.50.

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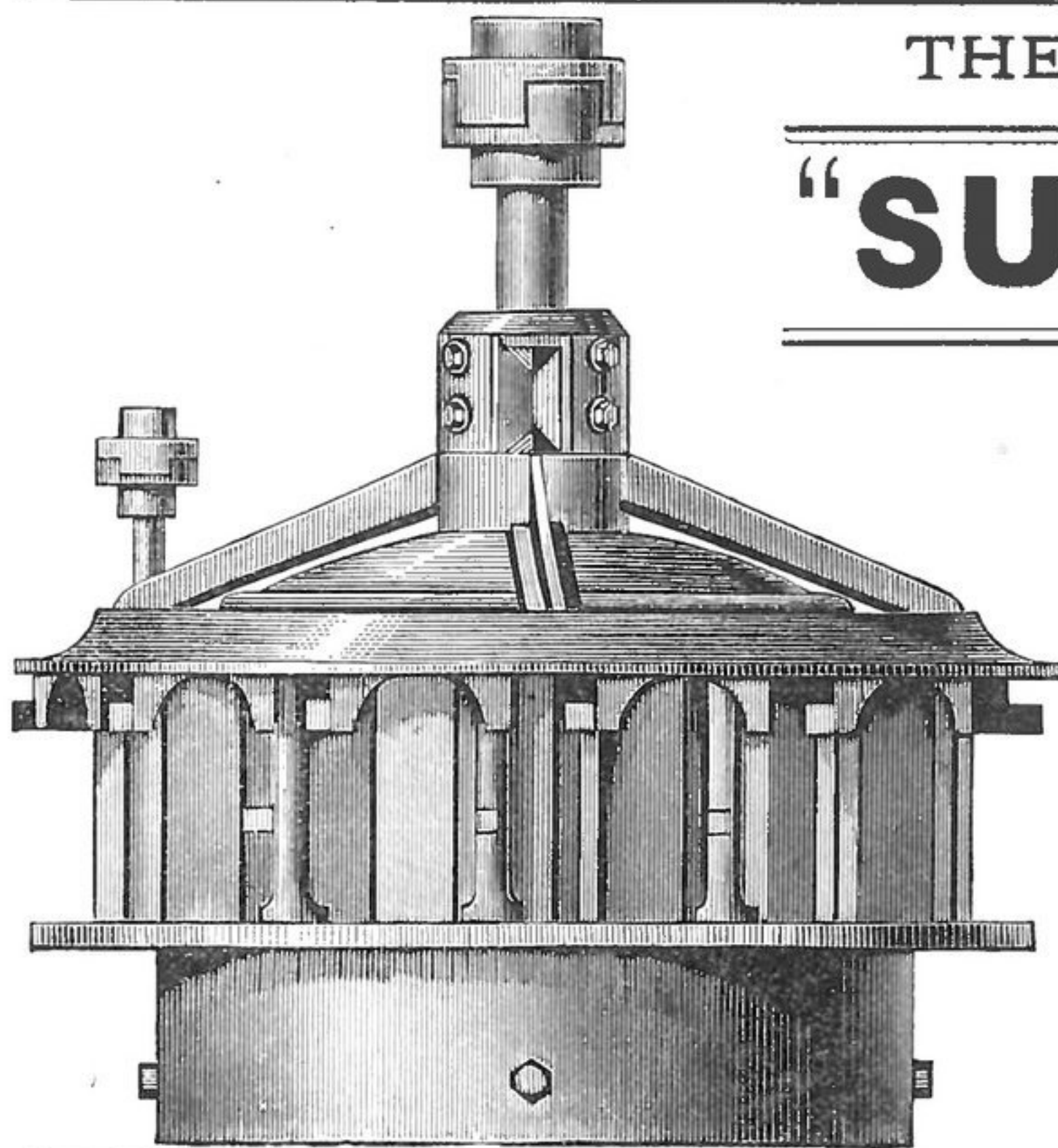
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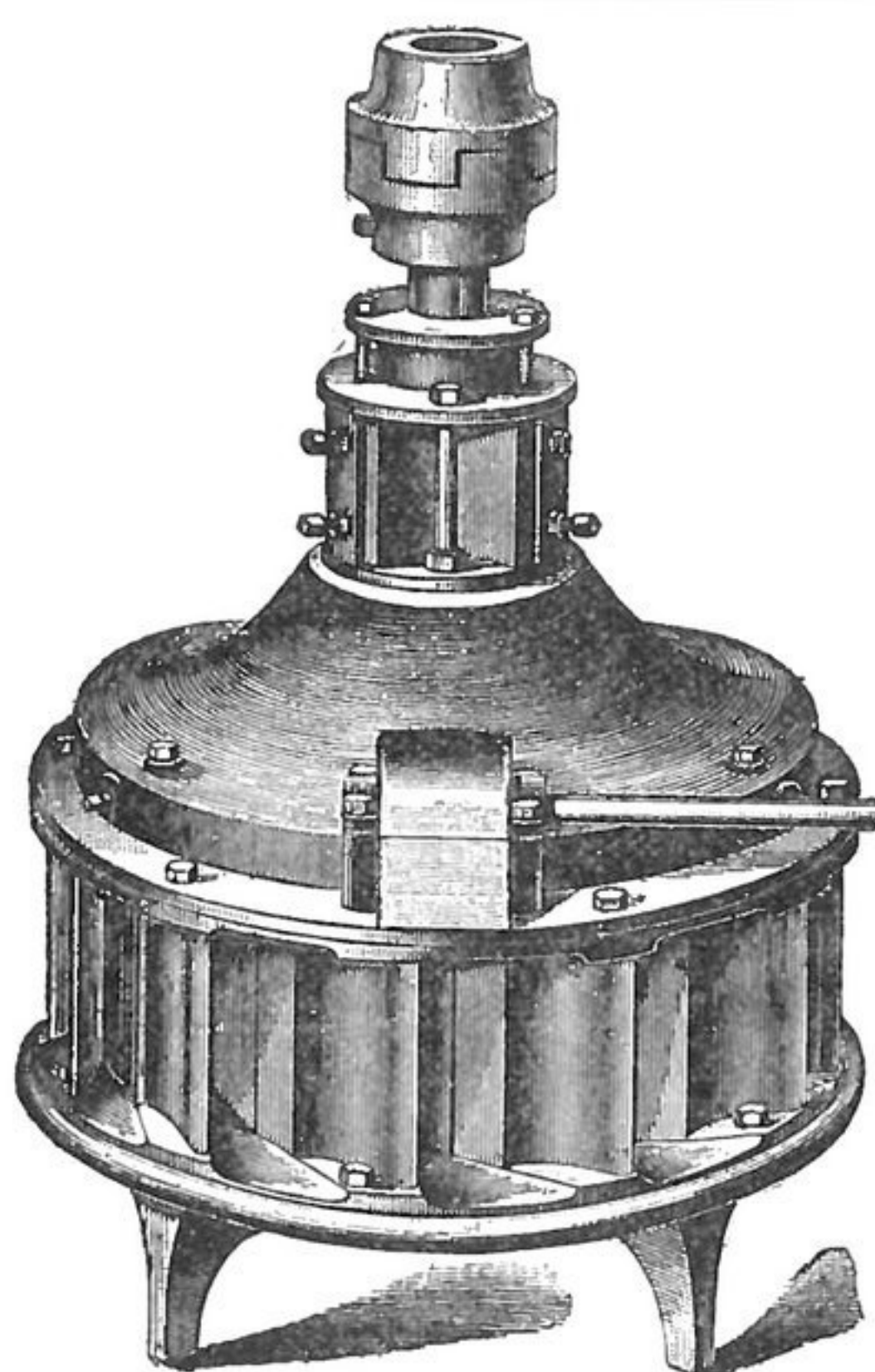
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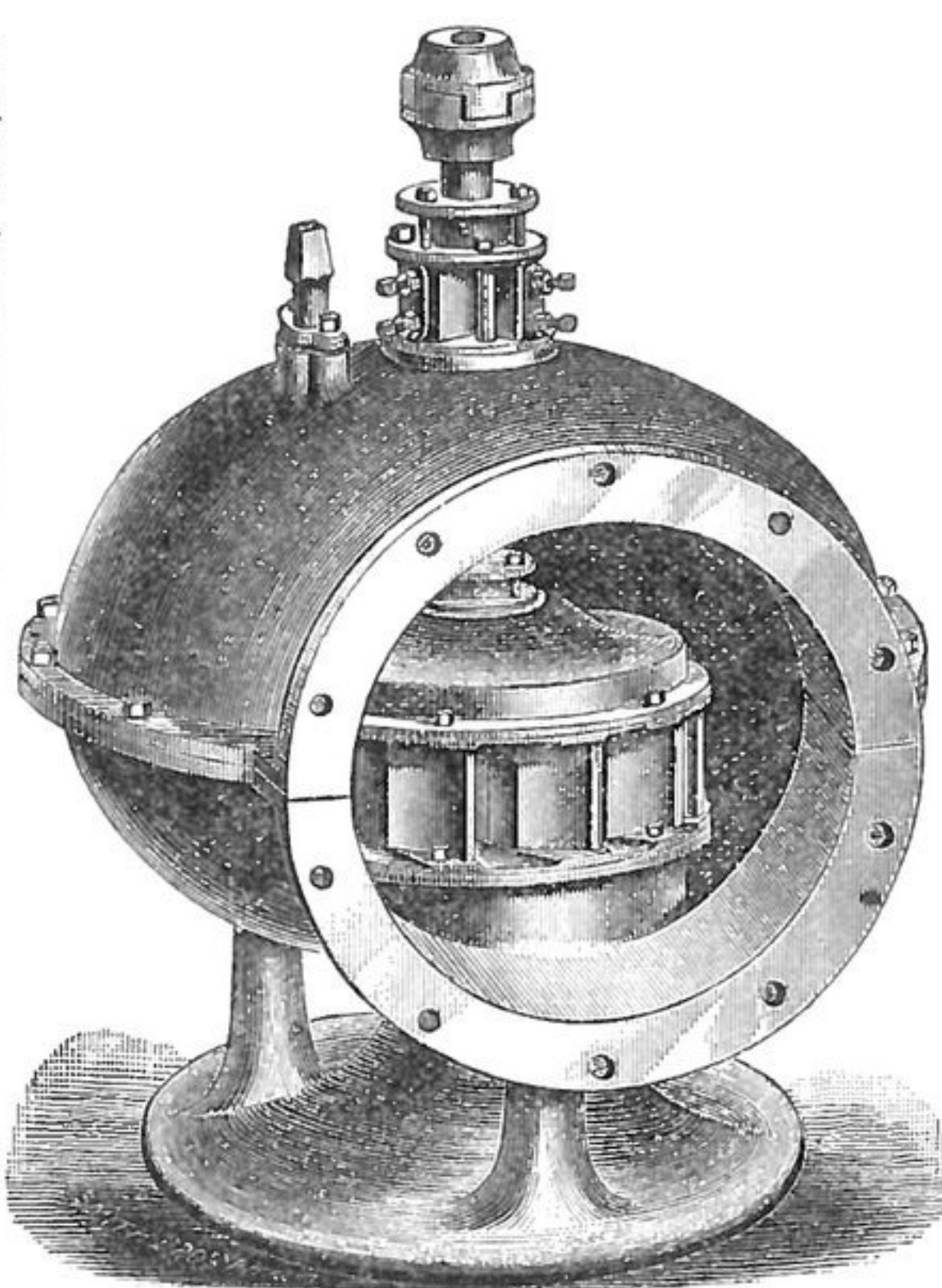
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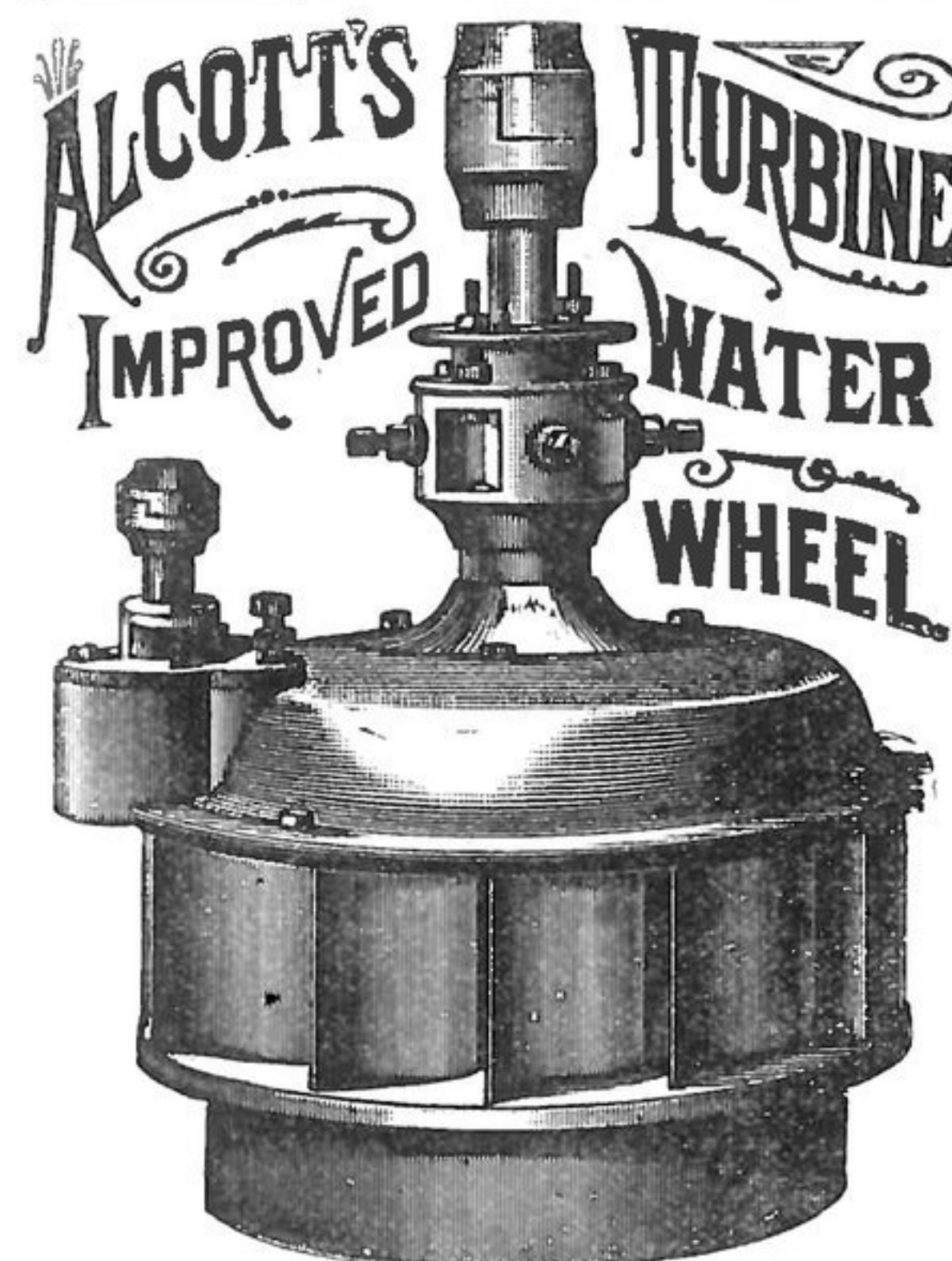


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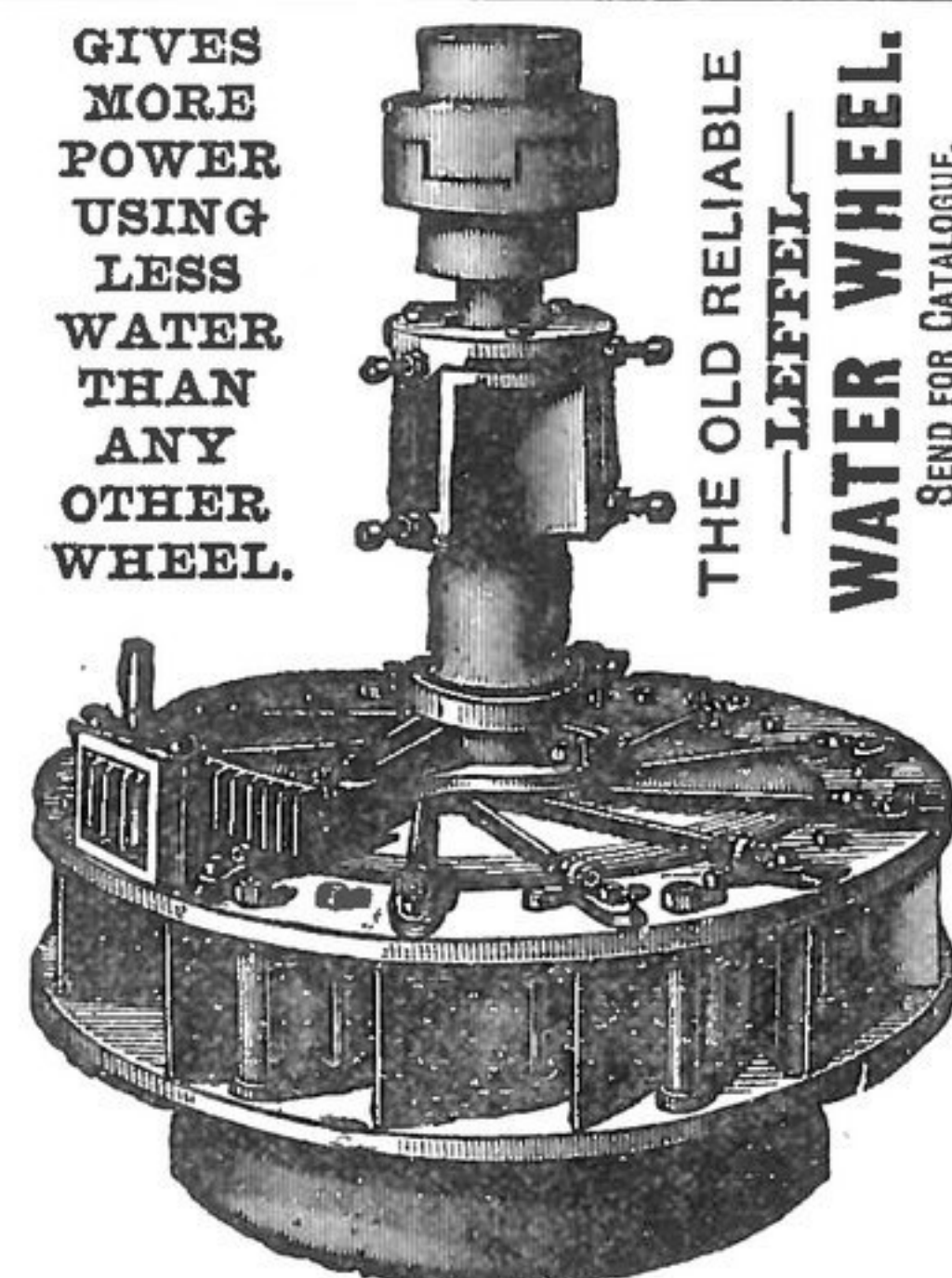


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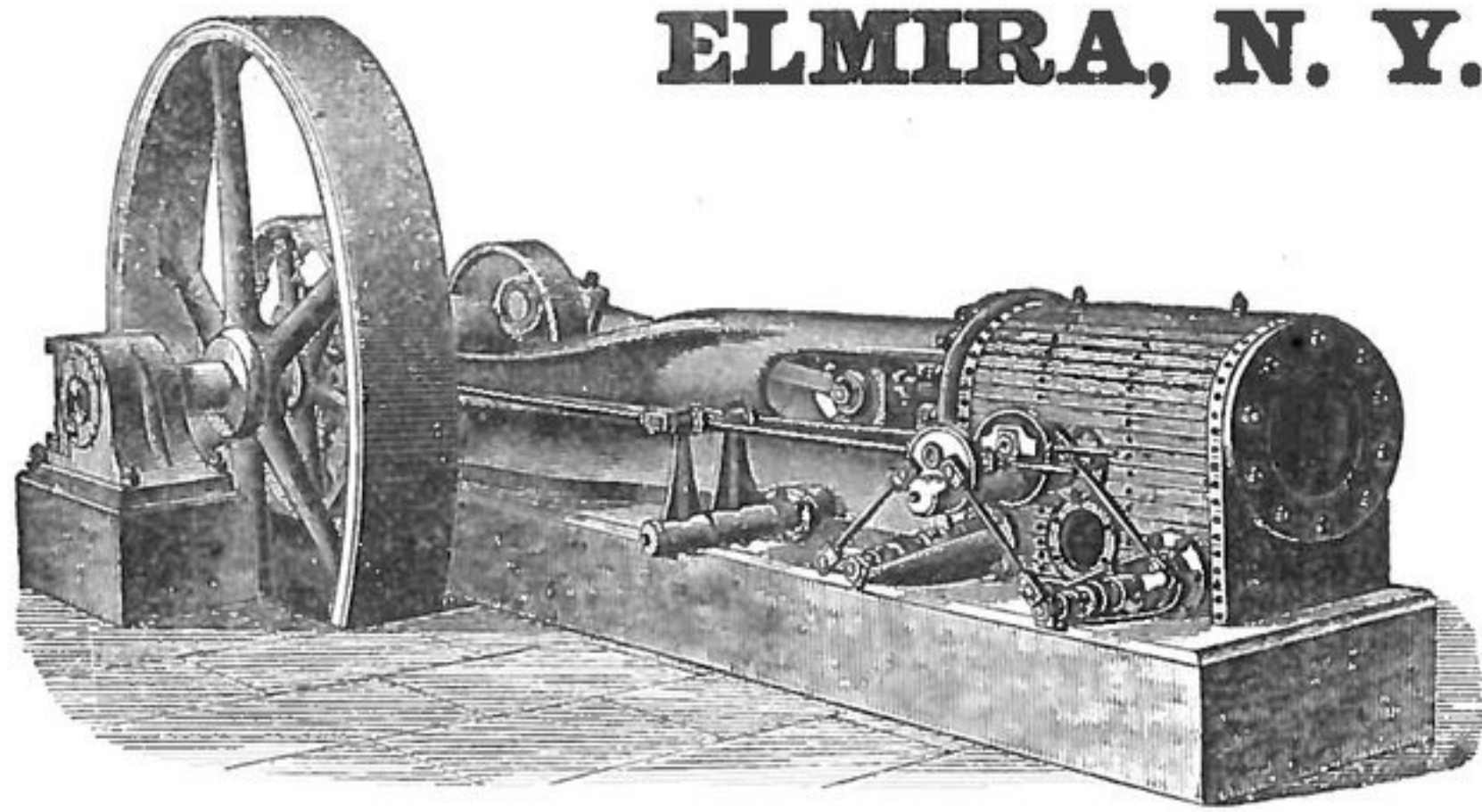


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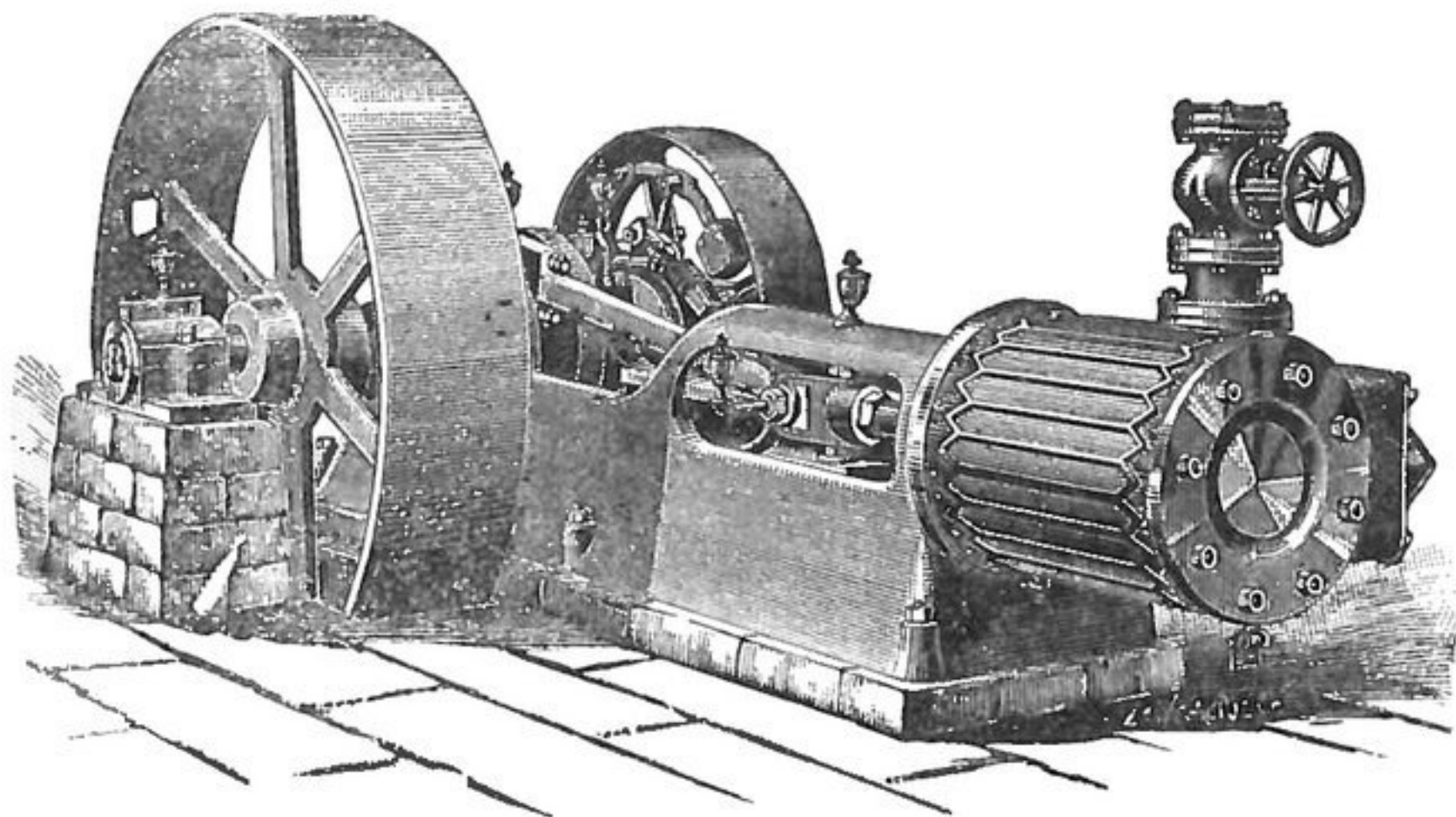
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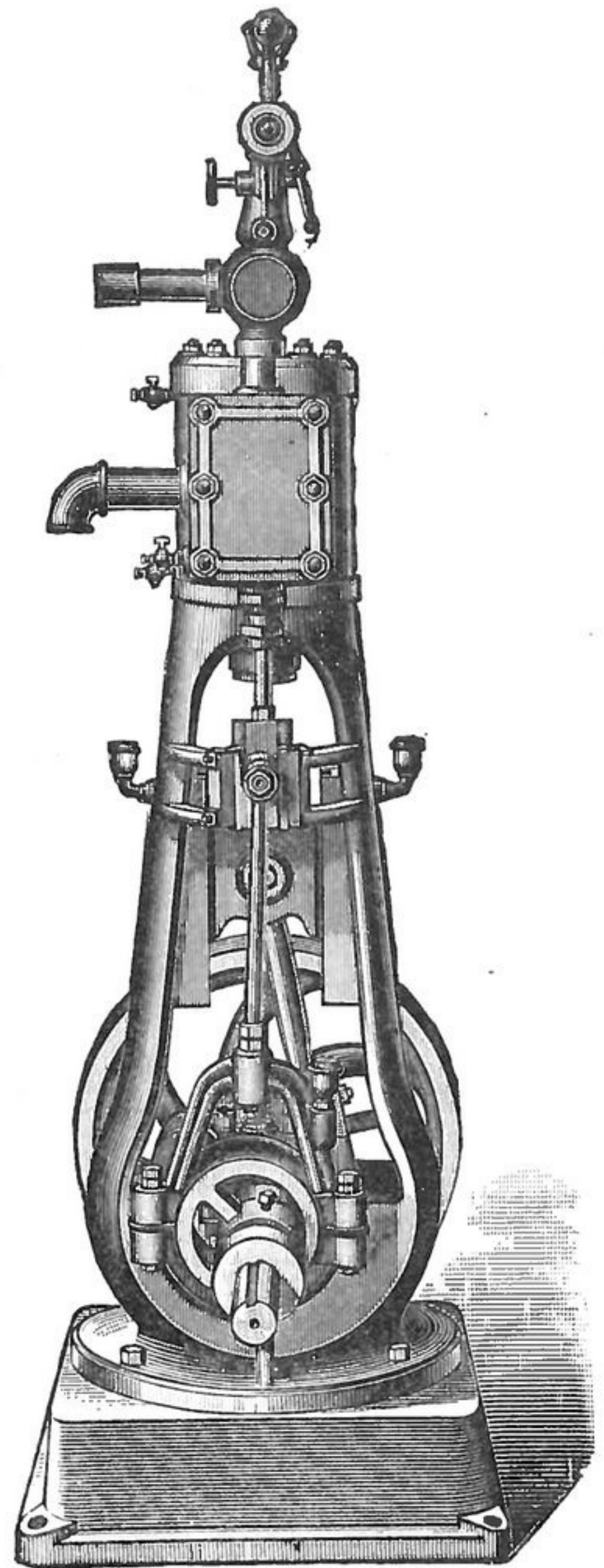
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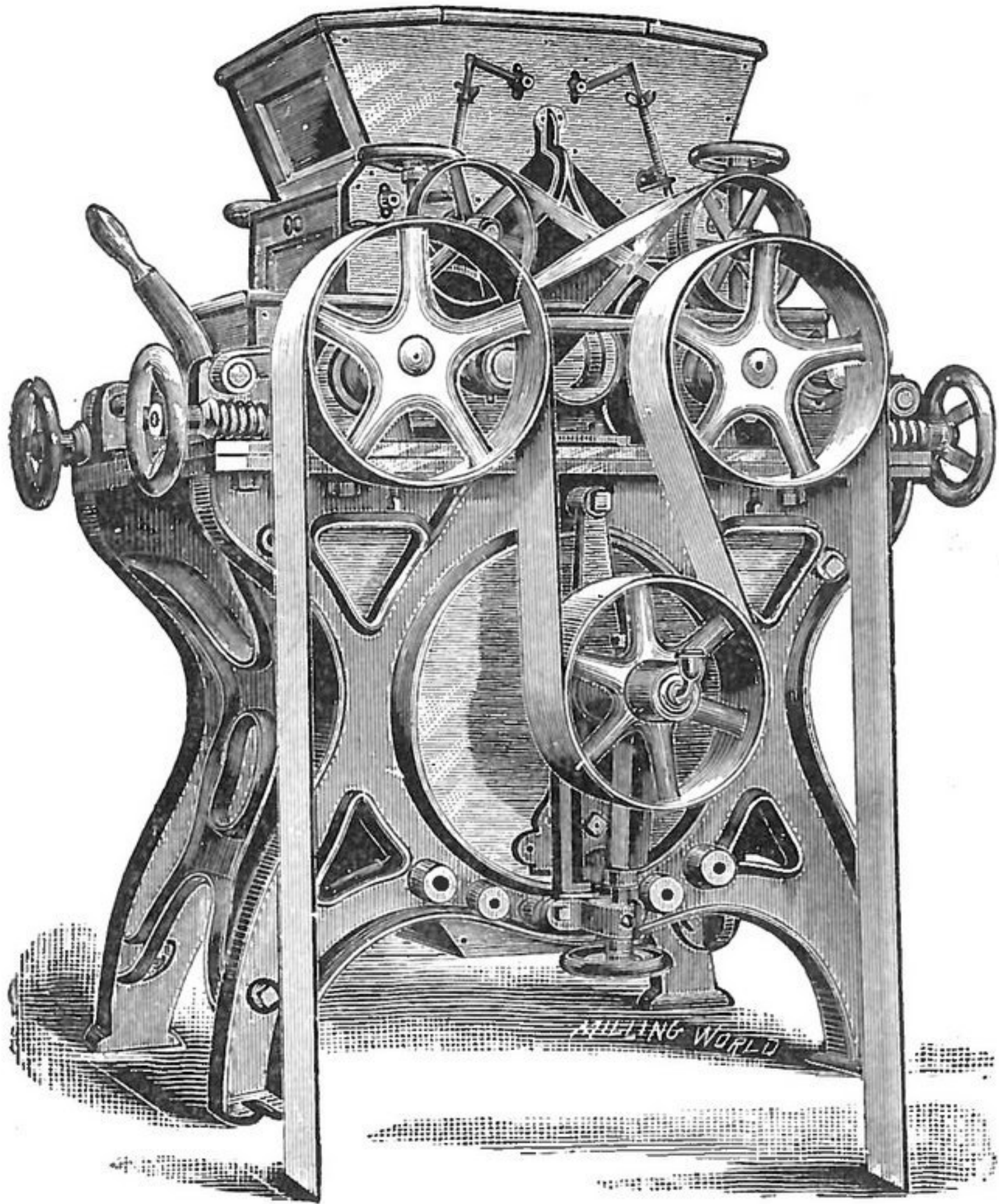
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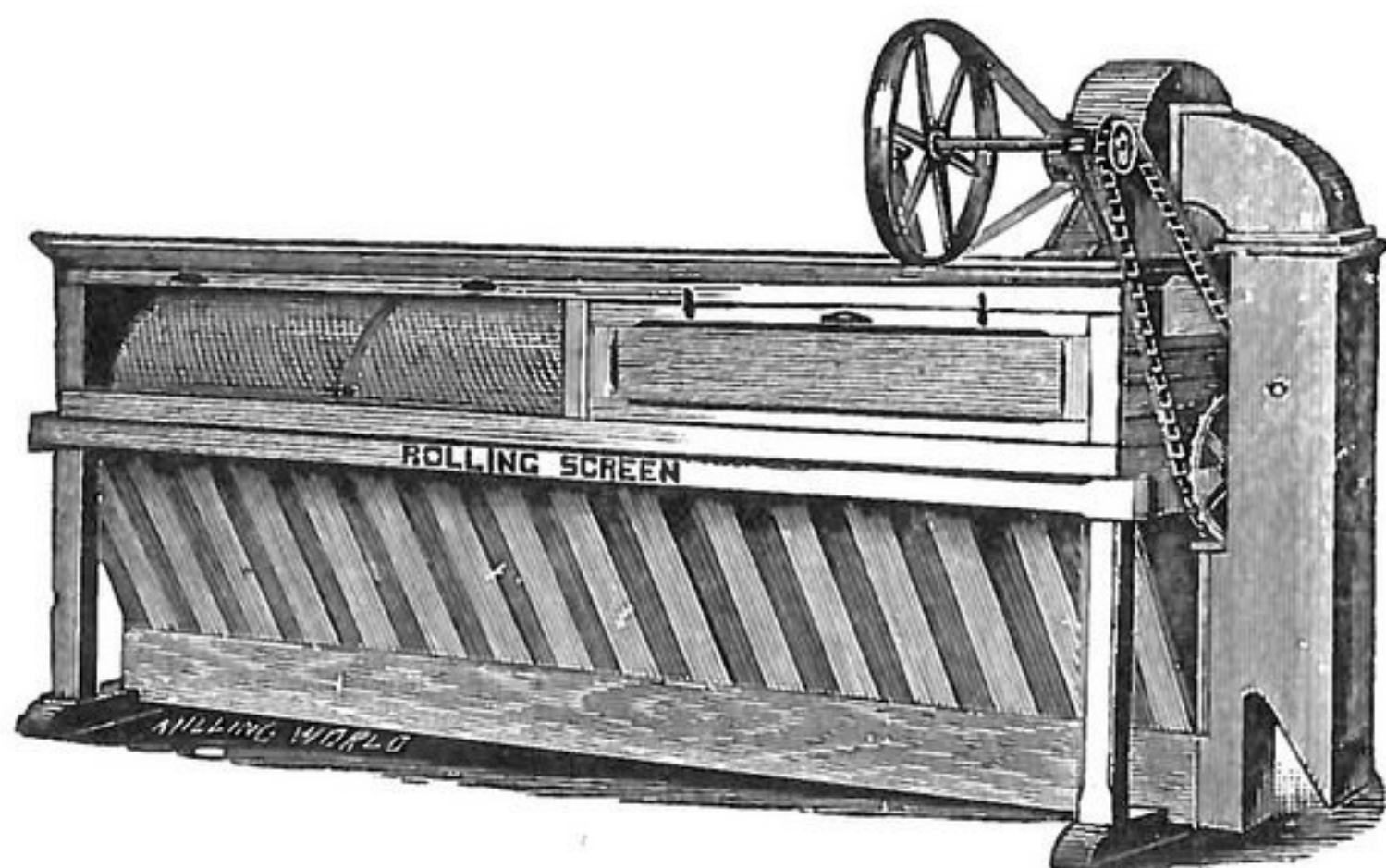
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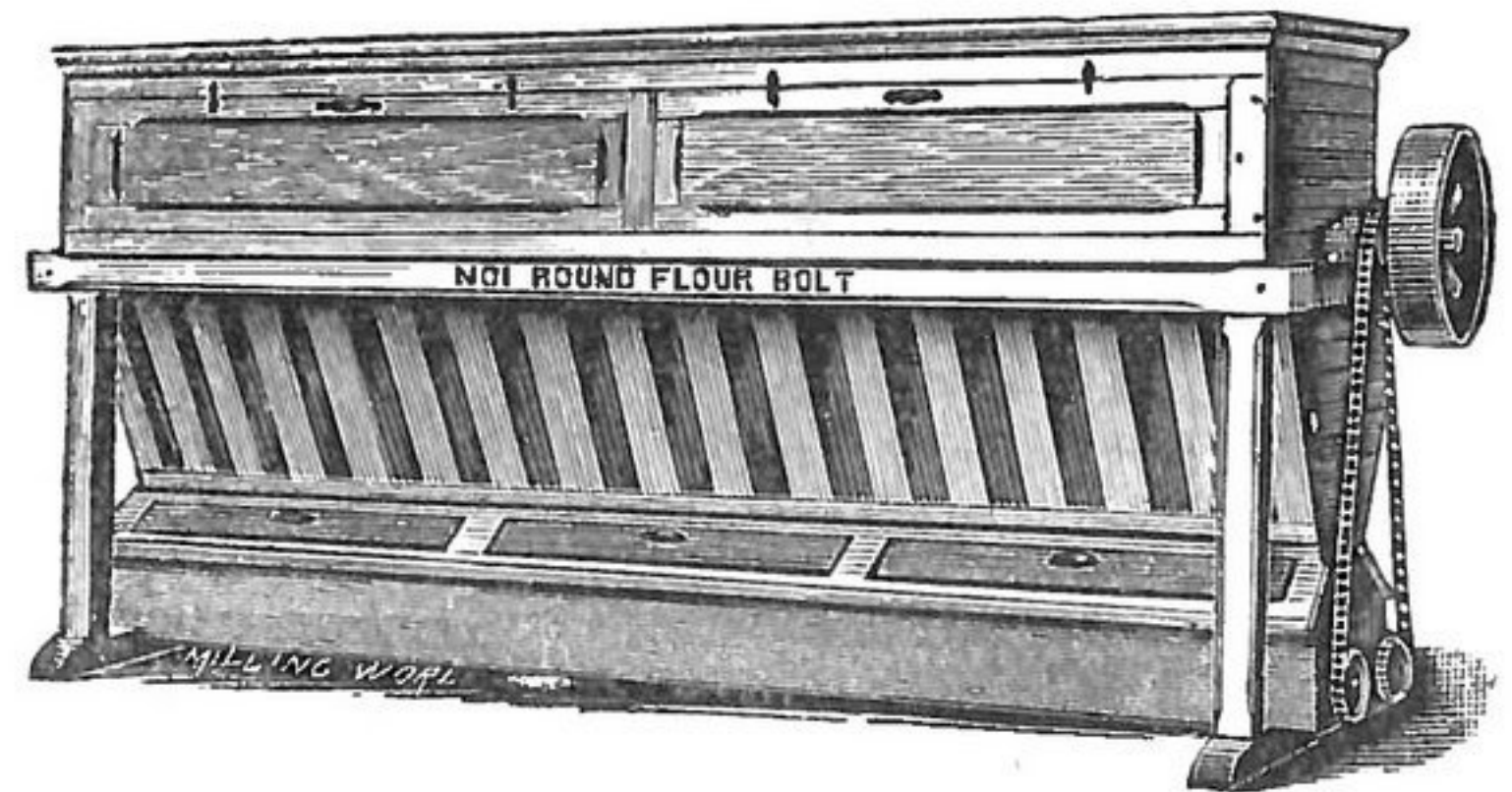
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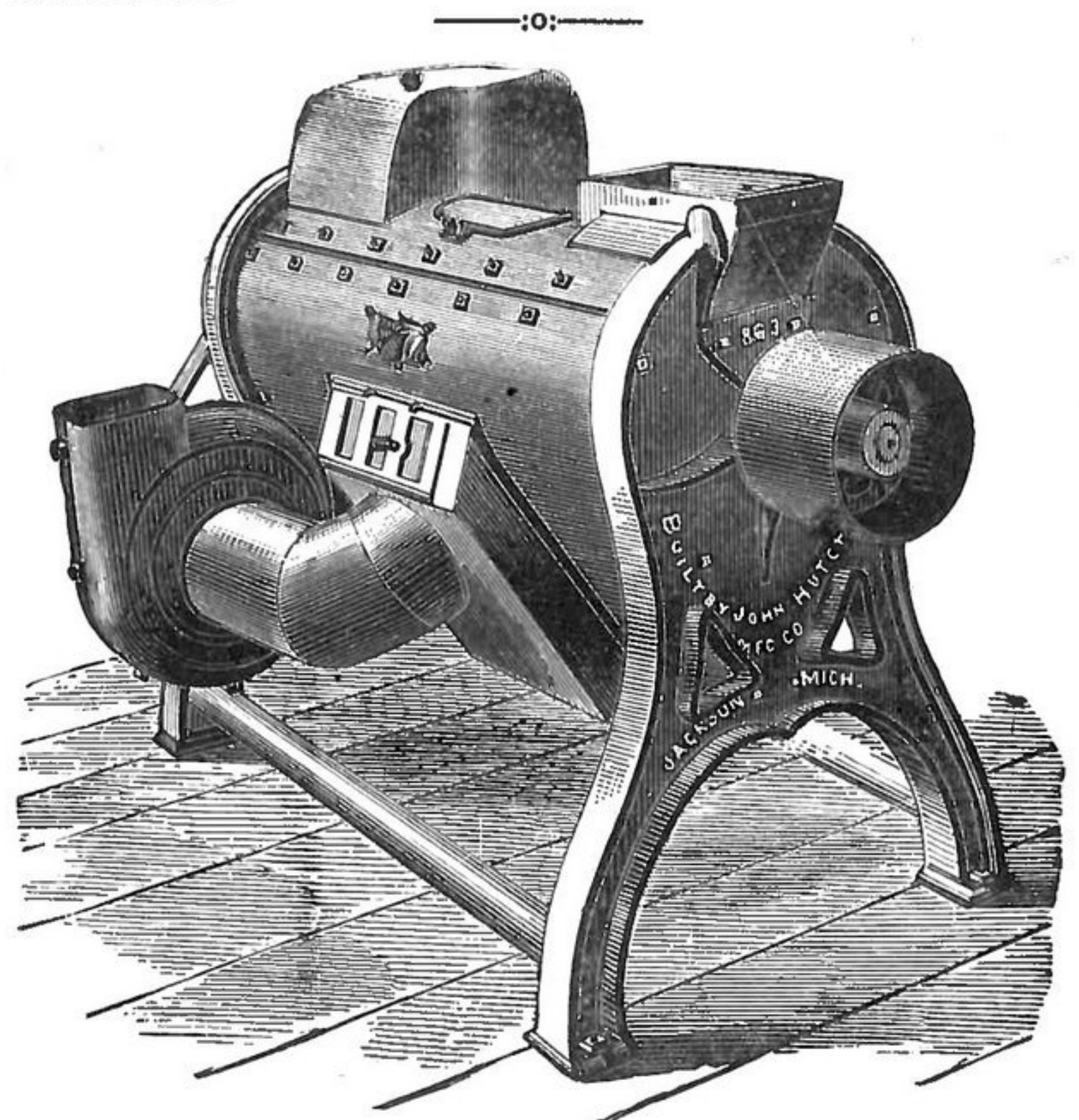


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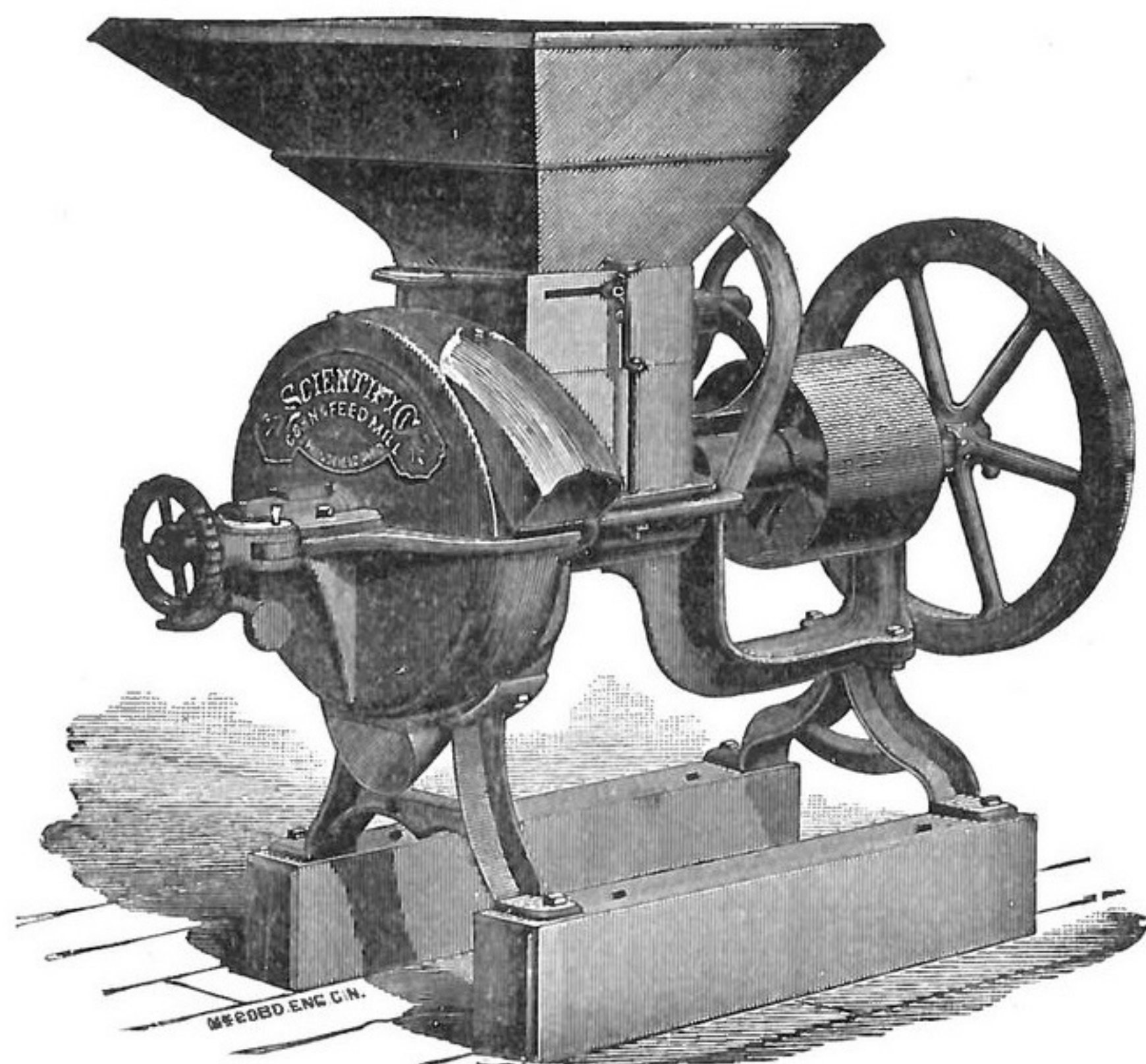
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